87-1496

Supreme Court, U.S.
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No._____

IN THE

Supreme Court of The United States

OCTOBER TERM, 1987

RACHELLE LABORATORIES, INC.,

Petitioner,

v.

ANITA OSBURN, Individually and as Independent Executrix of the Estate of Clois Dale Osburn, Deceased

Respondent.

On Certiorari to the United States Court of Appeals for the Fifth Circuit

---

PETITION FOR A WRIT OF CERTIORARI

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108 pp

QUESTIONS PRESENTED

1. Whether the mandatory federal regulations prescribing a specific warning to lay users administering veterinary chloramphenicol oral solution preclude a state law damages action based upon the alleged inadequacy of that warning?

2. Whether state tort law can override an explicit federal regulatory determination that veterinary drug manufacturers cannot and should not attempt to formulate and direct detailed, specific warnings and instruction to lay users administering a veterinary drug?

LIST OF PARTIES AND RULE 28.1 LIST

The parties to the proceeding below were the Petitioner Rachelle Laboratories, Inc. and the Respondent Anita Osburn, Individually and as Independent Executrix of the Estate of Clois Dale Osburn, Deceased.

Anchor Laboratories, Inc. was a defendant, and Jack Swain, D.V.M., was a third-party defendant in the district court. Since the Petition does not address any issues pertaining to Anchor Laboratories, Inc. or Jack Swain, D.V.M., and they were not parties to the proceedings before the United States Court of Appeals for the Fifth Circuit, they are not named as parties herein.

Pursuant to Rule 28.1 of the Rules of the Supreme Court of the United States, the following companies constitute all parent companies, subsidiaries (except totally owned subsidiaries) and affiliates of Petitioner Rachelle Laboratories, Inc.:

International Rectifier, Inc.

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No._____

In The

Supreme Court of The United States

October Term, 1987

Rachelle Laboratories, Inc.,

Petitioner,

v.

Anita Osburn, Individually and as Independent Executrix of the Estate of Clois Dale Osburn, Deceased

Respondent.

On Certiorari to the United States Court of Appeals for the Fifth Circuit

PETITION FOR A WRIT OF CERTIORARI

Petitioner respectfully petitions for a Writ of Certiorari to review the judgment and opinion of the United States Court of Appeals for the Fifth Circuit entered on August 28, 1987.

OPINION BELOW

The opinion of the United States Court of Appeals for the Fifth Circuit is reported at 825 F.2d 908 and is reprinted in the Appendix hereto, p. A-1, *infra*. On December 3, 1987, that Court ordered the substitution of Anita Osburn, as Independent Executrix of the Estate of Clois Dale Osburn, Deceased, for Clois Dale Osburn,[1] and denied Petitioner Rachelle Laboratories, Inc.'s Petition for Rehearing. That opinion is re-

[1] Clois Dale Osburn died on July 20, 1987, shortly before the Fifth Circuit rendered its opinion.

ported at 834 F.2d 425, and is reprinted in the Appendix hereto, p. A-33, *infra*.

JURISDICTION

The United States Court of Appeals for the Fifth Circuit entered judgment on August 28, 1987, and denied Petitioner's timely motion for rehearing on December 3, 1987.

Petitioner invokes the jurisdiction of this Court under 28 U.S.C. § 1254(1).

CONSTITUTIONAL AND STATUTORY PROVISIONS INVOLVED

U.S. Const. Art. 6, Cl. 2

Supreme Law of Land

This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made under the Authority of the United States, shall be the Supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

21 U.S.C. ∫ 331

The following acts and the causing thereof are prohibited:

(a) The introduction or delivery for introduction into interstate commerce of any food, drug, device, or cosmetic that is adulterated or misbranded.

21 U.S.C. ∫ 352

A drug or device shall be deemed to be misbranded —

(f) Unless its labeling bears (1) adequate directions for use; and (2) such adequate warnings against use in those pathological conditions or by children where its use may be dangerous to health, or against unsafe dosage or methods or duration of administration or application, in such manner and form, as are necessary for the protection of users: *Provided*, That where any requirement of clause (1) of this subsection, as applied to any drug or device, is not necessary for the protection of the public health, the Secretary shall promulgate regulations exempting such drug or device from such requirement.

21 U.S.C. ∫ 360b

(a)(1) A new animal drug shall, with respect to any particular use or intended use of such drug, be deemed unsafe for the purposes of section 351(a)(5) and section 342(a)(2)(D) of this title unless —

(A) there is in effect an approval of an application filed pursuant to subsection (b) of this section with respect to such use or intended use of such drug,

(B) such drug, its labeling, and such use conform to such approved application, and . . . .

(i) When a new animal drug application filed pursuant to subsection (b) of this section is approved, the Secretary shall by notice, which upon publication shall be effective as a regulation, publish in the Federal Register the name and address of the applicant and the conditions and indications of use of the new animal drug covered by such application, including any tolerance and withdrawal period or other use

restrictions and, if such new animal drug is intended for use in animal feed, appropriate purposes and conditions of use (including special labeling requirements) applicable to any animal feed for use in which such drug is approved, and such other information, upon the basis of which such application was approved, as the Secretary deems necessary to assure the safe and effective use of such drug. Upon withdrawal of approval of such new animal drug application or upon its suspension, the Secretary shall forthwith revoke or suspend, as the case may be, the regulation published pursuant to this subsection (i) insofar as it is based on the approval of such application.

STATEMENT OF THE CASE

This petition seeks review of the judgment of the United States Court of Appeals for the Fifth Circuit in a products liability action involving veterinary chloramphenicol oral solution.

Petitioner is a generic drug manufacturer — a company that manufactures and markets drug products that other companies have formulated, and tested, and that the federal Food and Drug Administration (the "FDA") already has reviewed and approved. Respondent and her deceased husband originally filed a personal injury action in the United States District Court for the Western District of Texas, Waco Division, against Petitioner and another generic drug manufacturer. They sought recovery for personal injuries that the decedent sustained when he contracted chronic myelogenous leukemia (CML), allegedly from spilling the drug on his skin while injecting cattle with veterinary chloramphenicol oral solution, a prescription veterinary drug specifically regulated under the Food, Drug and Cosmetic Act, 21 U.S.C. §§ 301, *et seq.* (the "FDCA"). A Waco, Texas jury found

Petitioner liable under Texas law for failing to provide adequate warnings and instructions directly to lay users like the decedent, found that the decedent's chloramphenicol use had caused his leukemia,[2] and found damages in the total

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[2] The jury found causation based upon the "expert" testimony of two toxicologists with no clinical background or experience with chloramphenicol or chronic myelogenous leukemia ("CML"), the decedent's disease.

Both toxicologists admitted there was no precedent in the medical or scientific literature to suggest that casual skin contact with veterinary chloramphenicol oral solution could directly induce any form of leukemia, much less CML, the peculiar clinical entity involved here. There is a generally accepted statistical association between chloramphenicol exposure (generally through direct injection) and aplastic anemia, a severe, usually fatal disease involving a complete wipeout or aplasia of the marrow's blood forming cells. And there is a body of scientific literature suggesting a causal connection between chloramphenicol exposure in surviving aplastic anemia patients who later develop acute (not chronic) leukemia.

But there is absolutely no medical or scientific literature documenting any case or proposing any theory that chloramphenicol exposure can directly induce any leukemia, including CML. Respondent did not contend, and offered no evidence that the decedent ever had aplastic anemia, the medical prerequisite to a causal connection in all prior reported cases and studies in the literature.

The Fifth Circuit rejected Petitioner's causation challenge, making the purely conclusory finding that the causation evidence presented a jury question. Petitioner submits that the Fifth Circuit totally misapplied the applicable federal standard of review for sufficiency of the evidence. In that respect, the decision below conflicts with other cases such as *Viterbo v. Dow Chem. Co.*, 826 F.2d 420 (5th Cir. 1987), *Thompson v. Southern Pac. Transp. Co.*, 809 F.2d 1167 (5th Cir. 1987), *Marder v. G. D. Searle & Co.*, 630 F.Supp. 1087 (D. Md. 1986), and *In re Agent Orange Product*

amount of $3,000,000. Based upon the jury verdict, the United States District Court for the Western District of Texas, Waco Division, entered judgment against Petitioner in the amount of $2,550,000 on January 2, 1986.[3]

In the courts below, Respondent asserted that Petitioner's veterinary chloramphenicol oral solution failed to adequately warn lay users like the decedent of the hazards and risks associated with the product's administration, and failed to adequately instruct lay users concerning proper handling. Respondent never contended that Petitioner had failed to provide adequate warnings and instructions to prescribing

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Liability Litigation, 603 F.Supp. 239 (E.D.N.Y. 1985). Petitioner concedes that that error alone does not justify review here, but suggests that this Court should review that aspect of the case if it grants the writ sought.

[3] The decedent testified that he had used veterinary choloramphenicol oral solution manufactured by Petitioner and Anchor Laboratories, Inc. to inject cattle. Prior to trial, Anchor settled Respondent's claims against it for a payment of $225,000. Petitioner asserted a cross-claim for contribution under Texas law. Thus, Anchor remained a party, though it did not participate in the trial.

Since Anchor marketed the chemically identical product, and used the identical federally mandated labeling, the district court required the jury to answer comparative fault issues once it had found Petitioner liable. The jury made a fault allocation of 15% against Anchor. Thus the district court entered judgment against Rachelle for 85% of the damages found.

Petitioner also asserted a third party claim against the prescribing veterinarian, Jack Swaim, D.V.M. Even though the Respondent had never asserted any claim against him, Dr. Swaim paid Respondent $50,000 to obtain a release, effectively precluding any further affirmative recovery against him under Texas law. The jury failed to find any negligence on the part of Dr. Swaim. Petitioner did not challenge those findings before the Fifth Circuit.

veterinarians. The district court rejected Petitioner's reliance on the specific federal laws and regulations governing veterinary chloramphenicol oral solution's labeling. Both the district court, and the Court of Appeals found that Texas law required Petitioner to formulate and direct specific detailed warnings and instructions to lay users. That holding creates a direct conflict with the applicable FDA regulations.

The FDA has promulgated mandatory regulations prescribing specific instruction and labeling requirements for veterinary chloramphenicol oral solution, a prescription antibiotic drug. The FDA regulatory structure required Petitioner (and other manufacturers) to issue a specified general warning to lay users, and to formulate and direct specific, detailed warnings and instructions to the prescribing veterinarian, based upon the FDA's determination that the manufacturers could not and should not provide specific, detailed warnings and instructions directly to lay users. The extensive FDA regulations reflect a clear intent to occupy the field, and to preempt state regulation. At the very least, the mandatory regulations preclude inconsistent state labeling requirements.

REASONS FOR GRANTING THE WRIT

The Court should grant a Writ of Certiorari to resolve the Questions Presented that concern important issues of federal preemption under the FDCA.

The decision of the United States Court of Appeals for the Fifth Circuit conflicts with other decisions under the FDCA. Further, the decision conflicts with several other recent Court of Appeals decisions concerning the relationship between federal labeling regulations and state products liability law.

This Court has not considered the preemptive effect of federal labeling regulations like the FDA regulations involved here on state product liability law. The decisions of the lower courts reflect considerable uncertainty on this issue that a decision from this Court would resolve.

The decision below clearly misapplies the applicable preemption principles. It ignores a direct conflict between the FDA's regulatory determination concerning the propriety of direct detailed warnings to lay users and Texas state law warning requirements.

I.

THE FDCA REGULATORY STRUCTURE

In 1938, Congress passed the FDCA, and established a system of premarketing clearance for any "new drug", one not generally recognized by qualified experts as safe for its intended use.[4] The original 1938 Act's broad definition of "new drug" included drugs for animal as well as human use. In 1968, Congress addressed the problem of regulatory uncertainty that a dramatic increase in the use of animal drugs in the animal feed industry from 1953 to 1968 had created. The Animal Drug Amendments of 1968 to the FDCA established the current statutory framework that controls the marketing of animal drugs, including Petitioner's veterinary chloramphenicol oral solution. *See* 1968 U.S. Code Cong. & Adm. News, p. 2607.

In 1971, pursuant to rulemaking proceedings commenced in May 1970, the FDA adopted a comprehensive set of

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[4] Congress passed the Harris-Keefauver Act amending the FDCA, and broadly increasing the FDA's regulatory responsibility to include efficacy or effectiveness of new drugs as well as safety. *See* 1962 U.S. Code Cong. & Adm. News, p. 2884.

regulations for new animal drugs, including veterinary chloramphenicol oral solution. *See* 36 Fed. Reg. 18375 (1971). With minor amendments, those regulations have been carried forward to the current regulations on animal drugs, feeds and related products. 21 C.F.R. Subchapter E, §§ 500 *et seq.* (1987).

The FDA's animal drug regulations create two classes of veterinary drugs — prescription and nonprescription veterinary drugs. In the case of nonprescription veterinary drugs, the FDA requires manufacturers to prepare labeling that includes "adequate directions for use by the layman." 21 C.F.R. § 514.1(a)(3)(ii) (1987).

The regulations also recognize that certain veterinary drugs are sufficiently toxic that "adequate directions for use by the layman" cannot be prepared. For those drugs, the FDA requires manufacturers to insert a specific warning to lay users: "Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian." 21 C.F.R. § 201.105 (1987). The FDA regulations then require the manufacturer to formulate "adequate information for use under which veterinarians can use the new animal drug safely." 21 C.F.R. § 514.1(a)(3)(iii) (1987). The regulations further specifically define "adequate information for use" to include disclosure of "any relevant warnings, hazards, contraindications, side effects and precautions." *See* 21 C.F.R. § 201.105(c)(1) & (d)(1) (1987).

The veterinary chloramphenicol oral solution regulations are even more explicit. 21 C.F.R. § 555.110(c) subparagraph a(3) expressly covered Petitioner's product.[5] It required Peti-

[5] In 1986, the FDA removed this particular regulation and withdrew its approval of existing new animal drug applications. It determined that many veterinarians were prescribing the drug in

tioner to label in accordance with 21 C.F.R. § 510.55 (1987). That in turn required labeling under 21 C.F.R. § 201.105 (1987) which expressly required the general "Caution" warning to lay users. The FDA's mandatory labeling does not create a minimum or maximum standard. Rather, the FDA has prescribed the precise warning to lay users, and the regulation prohibits manufacturers from using more or less detailed warnings and instructions to lay users than those in the approved new animal drug applications.

The explicit FDA rationale for the mandatory "Caution" warning to lay users and the requirement that manufacturers direct detailed, specific warnings and instructions to the veterinarian is that "because of toxicity or other potentiality for harmful effect, or the method of its use", "adequate directions for use" cannot be formulated for the laity. 21 C.F.R. § 201.105 1987.[6] The FDA has made the express determination that drug manufacturers like Petitioner should direct detailed warnings and instructions to veterinarians, not to lay users. Its regulatory decision preempts any state law duty to provide additional specific warnings and instructions to the laity beyond the general "Caution" warning.

II.

CONFLICT WITH OTHER FDCA DECISIONS

Other federal courts have specifically considered the issue of federal preemption under the FDCA. Certain decisions clearly hold that where the FDA has established specific

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derogation of the restriction to use in non-food producing animals. 51 Fed. Reg. 1367 (1986).

[6] The Sixth Circuit explicity upheld the FDA's authority to require that restrictive labeling. *United States v. Colahan*, 635 F.2d 564 (6th Cir. 1980), *cert. denied*, 454 U.S. 831 (1981).

federal labeling requirements, states cannot impose different labeling requirements under state statutory or general tort law. *Grocery Manufacturers of America, Inc. v. Gerace*, 755 F.2d 993 (2d Cir.), *aff'd*, 474 U.S.801, *cert. denied*, 474 U.S. 820 (1985); *National Women's Health Network, Inc. v. A. H. Robins Co.*, 545 F.Supp. 1177 (D. Mass. 1982); *Cosmetic Toiletry & Fragrance Association, Inc. v. Minnesota*, 440 F.Supp. 1216 (D. Minn. 1977), *aff'd*, 575 F.2d 1256 (8th Cir. 1978); *Hurley v. Lederle Laboratories*, 651 F.Supp. 943 (E.D. Tex. 1986); *Abbott v. American Cyanamid Co.*, No. 86-857-A (E.D. Va. Mar. 9, 1987).

The *Cosmetic, Toiletry & Fragrance Association* case considered the propriety of Minnesota labeling requirements for pressurized containers employing a saturated chlorofluorocarbon propellant sold in Minnesota. The state attempted to impose labeling requirements similar, but not identical to those required under the applicable FDA regulations. The district court issued a preliminary injunction barring enforcement of the Minnesota statute because of inconsistencies between the federal and state warning requirements. After reviewing the general question of federal preemption under the FDCA, the district court concluded that where the federal government has acted to impose specific labeling requirements, a state may not interfere with the federal scheme by attempting to impose additional or inconsistent requirements. The court stated:

> However, when federal agencies have perceived a specific risk and have required labeling to alleviate that risk, the court feels that a state's freedom to require other than identical labeling with respect to that risk is precluded.

440 F.Supp. 1223. The Sixth Circuit affirmed the district court, and expressly endorsed its reasoning. *Cosmetic, Toiletry*

& Fragrance Association, Inc. v. Minnesota, 575 F.2d 1256 (8th Cir. 1978).

The FDA's extensive regulatory control of labeling requirements for drugs, including Petitioner's product, evidences a clear preemptive intent. As noted in *Hurley v. Lederle Laboratories*, 651 F.Supp. 993 (E.D. Tex. 1986) the "FDA has a well-established policy of promoting uniformity in the area of labeling." 651 F.Supp. at 999 (citing 50 Fed. Reg. 5103 (1985)). States directly undercut the FDA policy of promoting uniformity in labeling if they impose greater, lesser or different labeling requirements.

III.

CONFLICT WITH OTHER DECISIONS ON THE PREEMPTIVE EFFECT OF FEDERAL LABELING REQUIREMENTS

Recently several circuit courts have considered an analogous situation in the context of cigarette labeling. In *Cipollone v. Liggett Group, Inc.*, 789 F.2d 181 (3rd Cir. 1986), *cert. denied*, 107 S. Ct. 907 (1987), a cigarette user sued several cigarette manufacturers asserting state common law claims including negligence and strict liability claims for inadequate warnings. The cigarette manufacturers asserted that the Federal Cigarette Labeling and Advertising Act, 15 U.S.C. §§ 1331 *et seq.* (the "FCLA"), preempted the state tort action based upon alleged failure to warn. The Third Circuit carefully considered the relationship of the FCLA to state law damage claims based upon allegedly inadequate warnings, and concluded the FCLA preempted those claims. Recently the First Circuit and the Eleventh Circuit reached similar conclusions. *Palmer v. Liggett Group, Inc.*, 825 F.2d 620 (1st Cir. 1987); *Stephen v. American Brands, Inc.*, 825 F.2d 312 (11th Cir. 1987).

In those cases, the courts of appeals determined that the state law damage claims necessarily depended upon the assertion that the manufacturer had a duty to provide a warning to users in addition to the congressionally mandated warning. The courts of appeals therefore held the state law claims preempted.

Respondent's state law damage claims necessarily depend on the assertion that Rachelle bore a duty to formulate and direct an entirely different warning to lay users than the FDA mandated "Caution." In fact, the Fifth Circuit determined that Rachelle bore a duty to formulate warnings and instruction that the FDA had specifically determined could not be formulated "because of [the product's] toxicity or other potentiality for harmful effect." 21 C.F.R. § 210.105 (1987). Under those circumstances, the Fifth Circuit decision directly conflicts with the federal preemption law in the products liability context as established in the cigarette labeling decisions.

IV.

UNCERTAINTY REFLECTED IN OTHER DECISIONS

As noted previously, several lower court decisions clearly hold that federal labeling requirements preclude states from imposing different labeling requirements under statutory or general tort law. *Grocery Manufacturers of America, Inc. v. Gerace*, 755 F.2d 993 (2nd Cir.) *aff'd*, 474 U.S. 801, *cert. denied*, 474 U.S. 820 (1985); *National Women's Health Network, Inc. v. A. H. Robins Co.*, 545 F.Supp. 1177 (D. Mass. 1982); *Cosmetic, Toiletry & Fragrance Association, Inc. v. Minnesota*, 440 F.Supp. 1216 (D. Minn. 1977), *aff'd*, 575 F.2d 1256 (8th Cir. 1987); *Hurley v. Lederle Laboratories*, 651

F.Supp. 993 (E.D. Tex. 1986); *Abbott v. American Cyanamid Co.*, No. 86-857-A (E.D. Va. March 9, 1987).

In addition to the Fifth Circuit's decision, other lower court decisions appear inconsistent with the holdings in those cases. *See Feldman v. Lederle Laboratories*, 97 N.J. 429, 479 A.2d 374 (1984) (holding that FDA regulation of drug industry does not preclude a state law products liability action); *Ferebee v. Chevron Chemical Co.*, 736 F.2d 1529 (D.C. Cir.), *cert. denied*, 469 U.S. 1062 (1984); *Martkinovic v. Wyeth Laboratories, Inc.*, 669 F.Supp. 212 (N.D. Ill. 1987); *Graham v. Wyeth Laboratories, Inc.*, 666 F.Supp. 1483 (D. Kan. 1987)[7]

The *Ferebee* case creates a particularly troubling uncertainty. It involved a state tort action based upon inadequate labeling of a pesticide. Chevron used the label that the EPA had mandated pursuant to the Federal Insecticide, Fungicide & Rodenticide Act, 7 U.S.C. §§ 136 *et seq.* The Court reached the novel conclusion that "Chevron can comply with both federal and state law by continuing to use the EPA-approved label and by simultaneously paying damages to successful tort Plaintiffs such as Mr. Ferebee [who claimed the label inadequately warned]." 736 F.2d at 1541.

Petitioner submits that analysis is inconsistent with established preemption principles. *See Chicago & N.W. Transporta-*

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[7] There are other decisions in this area that consider a related but distinct issue: whether compliance with FDA labeling requirements conclusively establishes absence of negligence or absence of product defect under state law. *See, e.g., Brochu v. Ortho Pharm. Corp.*, 642 F.2d 652 (1st Cir. 1981); *Salmon v. Parke, Davis & Co.*, 520 F.2d 1359 (4th Cir. 1975); *Feldman v. Lederle Laboratories*, 97 N.J. 429, 479 A.2d 374 (1984). That is an entirely different issue. A determination that compliance with FDA regulations does not preclude a state law action presents the preemption issue, but does not decide it.

tion Co. v. Kalo Brick & Tile Co., 450 U.S. 311 (1981); *San Diego Building Trades Council v. Garmon*, 359 U.S. 236 (1959); *Cipollone v. Liggett Group, Inc.*, 789 F.2d 181 (3rd Cir. 1986), *cert denied*, 107 S. Ct. 907 (1987).

V.

MISAPPLICATION OF PREEMPTION PRINCIPLES

In the case below, the Fifth Circuit expressly affirmed the district court's instructions that a manufacturer of veterinary chloramphenicol oral solution had a Texas law duty to formulate and direct detailed warnings to lay users. 825 F.2d at 914, Appendix p. A-15, *infra*. Yet, the FDA specifically made the regulatory determination that veterinary chloramphenicol oral solution falls into that limited category of veterinary drugs for which manufacturers cannot formulate warnings and instructions adequate to assure safe use by lay persons. Under these circumstances, the FDA required Rachelle and other manufacturers to use a specific warning to lay users ("*Caution*: Federal law restricts this drug to use by or on the order of a licensed veterinarian.") The FDA then required Rachelle to direct specific, detailed warnings and instructions in the package insert to the veterinarian. 21 C.F.R. § 201.105 & 510.55 (1987); *United States v. Colahan*, 635 F.2d 564 (6th Cir. 1980), *cert. denied*, 454 U.S. 831 (1981).

The Fifth Circuit misunderstood the applicable federal regulatory structure. It held that a "no action" provision of the animal drug regulations allowed a manufacturer of veterinary chloramphenicol oral solution to add to its warnings legend without seeking FDA approval. 21 C.F.R. § 514.8 (1987). Under that provision, Rachelle could have added additional warnings (to the veterinarian) to its labeling, and sought later FDA approval. Under § 514.8(e), Rachelle would be violating the FDCA, but the FDA would take no action for

that "misbranding" in violation of 21 U.S.C. § 352 during its consideration of a supplemental new animal drug application.

The Fifth Circuit utilized this no action provision to assert that Rachelle could have contravened the FDA's regulatory determination against attempting to formulate and direct specific warnings to lay users. Nothing in the no action provision permits that, and the Fifth Circuit's decision thus directly conflicts with the Sixth Circuit decision in *Cosmetic, Toiletry & Fragrance Association.*

By ignoring the direct conflict between the FDA's determination that veterinary chloramphenicol oral solution manufacturers should not attempt to formulate warnings and instructions for lay users, and Texas state law requirements that a manufacturer provide those warnings, the Fifth Circuit has thwarted the carefully crafted regulatory structure. In addition, the decision has saddled a generic drug manufacturer with liability for a multi-million dollar jury damage award because of alleged inadequacy of a federally mandated "caution" label. That result is clearly unjust and this Court should correct the Fifth Circuit's error.

CONCLUSION

For the foregoing reasons, the Court should grant this Petition for Writ of Certiorari.

Respectfully submitted,

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OSBURN v. ANCHOR LABORATORIES, INC.

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Clois OSBURN and Anita Osburn, Plaintiffs-Appellees,

v.

ANCHOR LABORATORIES, INC., Defendant,

Rachelle Laboratories, Inc., Defendant-Appellant.

No. 86–1094.

United States Court of Appeals, Fifth Circuit.

Aug. 28, 1987.

User and spouse brought products liability action against manufacturer of veterinary chloramphenicol to recover for leukemia. The United States District Court for the Western District of Texas, Walter S. Smith, Jr., J., entered judgment on jury verdict in favor of user and spouse. Manufacturer appealed. The Court of Appeals, Garwood, Circuit Judge, held that: (1) federal statute and regulations on labeling of veterinary chloramphenicol did not preempt Texas law on duty to warn; (2) Texas learned intermediary doctrine did not apply to relieve manufacturer of veterinary chloramphenicol of duty to warn ultimate user of danger to himself when he administered drug, as cowboy, to calves; and (3) evidence established that exposure to veterinary chloramphenicol caused user's leukemia, even though user was not diagnosed with aplastic anemia before contracting leukemia.

Affirmed in part, vacated in part, and remanded.

1. States Key 18.11

When Congress evidences, either expressly or inferentially, through comprehensiveness of federal regulatory scheme, an intent totally to occupy given field, state law falling within that field is preempted. U.S.C.A. Const. Art. 6, cl. 2.

2. United States Key 18.5

Even if Congress has not entirely displaced state regulation in an area, any state law that actually conflicts with federal law is preempted. U.S.C.A Const. Art. 6, cl. 2.

3. Drugs and Narcotics Key 7
States Key 18.65

Federal statute and regulations for labeling of veterinary chloramphenicol did not prevent manufacturer from adding warning on label about dangers of fatal blood diseases associated with exposure to chloramphenicol and did not preempt Texas law on duty to warn user; regulations pertaining to veterinary chloramphenicol did not set forth particular, mandatory label; regulation specifically permitted manufacturer to add additional warnings to previously approved drug label as soon as manufacturer became aware to necessity to warn. Federal Food, Drug and Cosmetic Act, §§ 1-902(b, c), 21 U.S.C.A. §§ 301-392; U.S.C.A. Const. Art. 6, cl. 2.

4. Drugs and Narcotics Key 18

Texas learned intermediary doctrine did not apply to relieve manufacturer of veterinary chloramphenicol of duty to warn ultimate user of danger to himself when he administered drug, as cowboy, to calves; veterinarian, who prescribed drug for administration by user, was not "learned

intermediary" with regard to dangers to humans, who were exposed to drug in process of administering it to animals.

See publication Words and Phrases for other judicial constructions and definitions.

5. Federal Civil Procedure Key 2117

Federal, rather than state, law standard governed determination whether sufficient evidence was presented to defeat motion for directed verdict in diversity case.

6. Drugs and Narcotics Key 21

Evidence supported jury's conclusions that exposure to veterinary chloramphenicol caused leukemia of user who administered drug, as cowboy, to calves, that causation existed, even though aplastic anemia did not precede user's leukemia, and that drug manufacturer was liable under failure to warn and strict products liability theories.

7. Evidence Key 570, 571(9)

Expert's opinion need not be generally accepted in scientific community before it can be sufficiently reliable and probative to support jury finding; medical expert opinion testimony that is controversial in its conclusions can support jury finding of causation, as long as doctor's conclusional opinion is based upon well-founded methodologies. Fed.Rules Evid.Rule 703, 28 U.S.C.A.

8. Evidence Key 571(9)

Opinions of user's experts that user's leukemia was caused by veterinary chloramphenicol, even though user was not diagnosed as having aplastic anemia, were based upon methodologies that physicians use to diagnose etiology of particular patient's disease and, therefore, could support jury finding

of causation in products liability action, where experts relied upon particular areas of expertise, characteristics of user's individual cases presented in medical records, and scientific studies and case histories reported in generally accepted medical literature. Fed.Rules Evid.Rule 703, 28 U.S.C.A.

9. Federal Civil Procedure Key 2350

Records indicating that user of veterinary chloramphenicol did not undergo blood test during examinations to obtain truck driver's permit would not have changed expert's testimony that no other cause produced user's leukemia and that chloramphenicol caused user's leukemia, and, therefore, did not justify new trial on basis of "newly discovered evidence," even though user testified that physicians, who examined him for driver's permit, found blood count to be normal, where other evidence indicated that user's blood tests were normal before he was exposed to chloramphenicol. Fed.Rules Civ.Proc.Rules 59, 61, 28 U.S.C.A.

See publication Words and Phrases for other judicial constructions and definitions.

10. Drugs and Narcotics Key 20

User's future loss of earning capacity as result of leukemia produced by exposure to veterinary chloramphenicol was to be calculated, under Texas law, on basis of work life expectancy at time of injury, undiminished by any shortening of that expectancy as result of injury, rather than life expectancy from date of diagnosis of leukemia.

11. Federal Courts Key 945

If district court uses general verdict interrogatory and instructs on several elements of damages, appellate court may

elect to grant new trial without providing option of remittitur.

12. Federal Courts Key 945

Remittitur to reduce excessive damage award to user of veterinary chloramphenicol was preferable to new trial, even though district court failed to submit special interrogatories to jury on damages for pain and suffering, mental anguish, loss of physical capacity, medical expenses, and lost earning capacity, where Court of Appeals could determine proper amount.

13. Drugs and Narcotics Key 20

Award of $2,500,000 was excessive to compensate user for leukemia caused by exposure to veterinary chloramphenicol, past and future loss of earning capacity, past medical expenses, physical pain and suffering, loss of physical capacity, and mental anguish; $350,000 was maximum award permissible for loss of past and future earning capacity based on annual capacity of $20,000, 20-year life expectancy, and two percent below market discount rate; evidence did not support award of $2,143,300 for noneconomic portion of loss, in that user would not have to endure continuous, excruciating pain.

14. Drugs and Narcotics Key 20

Award of $500,000 was not excessive to compensate spouse for loss of user's love and affection and household services due to leukemia caused by exposure to veterinary chloramphenicol.

Appeal from the United States District Court for the Western District of Texas.

Before WISDOM, RUBIN, and GARWOOD, Circuit Judges.

GARWOOD, Circuit Judge:

In this Texas law diversity case, plaintiffs-appellees Clois Osburn and Anita Osburn (Osburns) sued Anchor Laboratories, Inc. (Anchor) and Rachelle Laboratories, Inc. (Rachelle) for personal injuries under negligence and strict products liability theories. The Osburns alleged that due to the defendant drug manufacturers' failure to warn Mr. Osburn of the dangers to persons administering veterinary chloramphenicol and their failure to give him adequate instructions for its use, Mr. Osburn contracted leukemia. Answering special interrogatories, the jury found the defendants liable under both theories. The district court entered judgment on the verdict in favor of the Osburns. Rachelle appeals, claiming that federal law preempts the Osburns' tort claims for failure to warn, that the "learned intermediary" doctrine absolved it of any duty to warn Mr. Osburn directly, that the Osburns failed to prove causation, and that newly discovered evidence and an excessive damages award require a new trial, or, alternatively with respect to the excessiveness complaint, a remittitur.

Facts and Proceedings Below

When Clois Osburn was diagnosed as having leukemia, he was forty-two years old. For almost the entirety of his adult life, he had worked as a cowboy in the Texas panhandle, often caring for sick cattle and horses. In September 1982, Osburn obtained from Dr. Swain a prescription for veterinary chloramphenicol oral solution, which he immediately began administering daily to the sick calves he was caring for. Over the following eighteen months, he used ten to thirteen cases of chloramphenicol, each containing six sixteen-ounce bot-

tles of the antibiotic. Of this total, two or three cases consisted of chloramphenicol produced by Anchor and the other eight to ten cases were of Mychel-Vet, the brand name for Rachelle's version of the drug.

Since the chloramphenicol came in plastic capped bottles into which a needle could not be inserted, each morning Osburn poured several bottles of the drug from their original bottles into other, same sized bottles with injectable rubber lids. These he carried in a medicine bag on his horse's saddle to pastures where the calves grazed. To administer the drug, Osburn straddled the sick animal, inserted a syringe into the rubber lid of a bottle containing chloramphenicol, filled it, and injected the calf with a 60cc syringe-full dose of the drug. In the process of filling the syringe, chlorampenicol leaked from previously-made syringe holes in the rubber lid. The chloramphenicol often ran down Osburn's hand and arm, getting into scratches and cuts on his arm. Osburn recalled that on one occasion so much of the drug got into a rope burn on his arm that he could taste its bitterness in his mouth. Osburn wore leather gloves on the job, and testified that by the end of each day the gloves were soaked through with chlorampenicol.

In February 1984, Osburn visited his family physician (Dr. Harlow), who detected a large knot near Osburn's spleen. Dr. Harlow hospitalized Osburn, performed tests, and tentatively diagnosed Osburn's condition as leukemia. Later that month Osburn underwent further tests, including a bone marrow biopsy, at the direction of oncologist Dr. Karim Nawaz. On February 28, 1984, Dr. Nawaz confirmed Dr. Harlow's diagnosis of leukemia, giving Osburn the specific diagnosis of chronic myelogenous leukemia. The doctors informed Osburn that from the date of diagnosis he could expect to live two to five years.

On August 8, 1984, the Osburns filed this suit against Anchor and Rachelle. Subsequently, Anchor and Rachelle filed cross-claims against each other for contribution. The defendants then impleaded Dr. Jack Swain, the veterinarian from whom Osburn obtained the chloramphenicol, demanding indemnity and contribution. Shortly before trial, the Osburns reached a settlement agreement with Anchor and Dr. Swain.[1]

The Osburns tried their case against Rachelle on December 2-6, 1985. Rachelle's motion for directed verdict at the close of all the evidence was denied. Answering special interrogatories, the jury found that Rachelle had failed to provide adequate warnings to Mr. Osburn regarding the risk of fatal blood disorders from absorption of chloramphenicol, that this failure was a producing (and proximate) cause of Osburn's leukemia, and, therefore, that Rachelle was liable under both strict products liability and negligence theories. Pursuant to the district court's instruction that if it found Rachelle liable, then as a matter of law Anchor was also liable, the jury apportioned causation at eighty-five percent attributable to Rachelle and fifteen percent attributable to Anchor. The jury awarded $2,500,000 damages to Clois Osburn and $500,000 damages to Anita Osburn. The district court entered judgment for the Osburns against Rachelle, awarding all damages minus the fifteen percent attributable to Anchor. Rachelle moved for judgment notwithstanding the verdict, and for new trial or, alternatively, a remittitur.

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[1] Pursuant to the settlement agreement, Anchor paid the Osburns $225,000 in exchange for a release of all their claims against it. Although the Osburns had not formally brought any claims against Dr. Swain, he also paid them $50,000 in exchange for a full release. Upon motion by Rachelle, the district court then realigned Anchor as a third-party defendant. Anchor was unrepresented at trial and did not actively participate in the proceedings.

The district court denied these motions and this appeal followed.

Discussion

I. Preemption

A. Preemption principals

Preemption doctrine finds its roots in the supremacy clause of the Constitution, which mandates that federal law shall be the "supreme Law of the Land." U.S. Const. art. VI, cl. 2. The Supreme Court has long interpreted this clause to authorize Congress to enact laws under its enumerated powers that preempt state laws governing the same subject. *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 210-11, 6 L.Ed 23 (1824). State common law as well as state statutes and regulations can be preempted by federal law. *See, e.g., Chicago & N.W. Transp. Co. v. Kalo Brick & Title Co.*, 450 U.S. 311, 101 S.Ct. 1124, 67 L.Ed.2d 258 (1981).

[1, 2] Preemption occurs in two general contexts. When Congress evidences, either expressly or inferentially through the comprehensiveness of the federal regulatory scheme, an intent to totally occupy a given field, state law falling within that field is preempted. Alternatively, even if Congress has not entirely displaced state regulation in an area, any state law that actually conflicts with federal law is preempted. *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 104 S.Ct. 615, 621, 78 L.Ed.2d 443 (1984); *Pacific Gas & Elec. Co. v. State Energy Resources Conservation & Dev. Comm'n*, 461 U.S. 190, 103 S.Ct. 1713, 1722, 75 L.Ed.2d 752 (1983). Such a conflict arises when "compliance with both federal and state regulations is a physical impossibility," *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 83 S.Ct. 1210, 1217, 10 L.Ed.2d 248 (1963), *or* where state law "stands as an obstacle to the accomplishment of the full purposes and objectives of Con-

gress." *Hines v. Davidowitz*, 312 U.S. 52, 61 S.Ct. 399, 401, 85 L.Ed. 581 (1941), *quoted in Silkwood*, 104 S.Ct. at 621.

B. Rachelle's argument

[3] In this case, Rachelle argues that the Food, Drug and Cosmetic Act (FDCA),[2] 21 U.S.C. §§ 301-392, and the Food and Drug Administration's (FDA) implementing regulations governing veterinary prescription drug labeling, *see* 21 C.F.R. §§ 201.105, 514.1-514.8, preempt the Osburns' state common-law tort claims based upon failure to warn. According to Rachelle, a direct conflict exists between the FDCA and the Osburns' tort claim under Texas law because it is impossible for Rachelle to comply with both the FDA labeling requirements and the state law duty to warn.[3] Rachelle bases this

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[2] The FDCA is a criminal statute that makes unlawful the manufacture, sale, and marketing in interstate commerce of "misbranded" drugs. *See* 21 U.S.C. § 331. It authorizes government seizure and condemnation of such drugs. *Id.* § 334. The definition of "misbranding" is set forth in 21 U.S.C. § 352, which sets forth drug labeling requirements and provides that drugs with labels that violate any of the requirements will be deemed misbranded.

[3] Rachelle does not contend, however, that the FDCA reflects, expressly or by implication from comprehensiveness, any congressional intent to supersede totally state common-law tort claims for injuries resulting from a drug producer's failure to warn of a drug's dangerous propensities, and we have found no such intent. *Accord Feldman v. Lederle Laboratories*, 97 N.J. 429, 479 A.2d 374 (1984) (FDCA and FDA regulation of prescription drug labeling held not to preempt state tort action for failure to warn adequately of dangers of tetracycline use); *see also Silkwood*, 104 S.Ct. at 622-26 (Atomic Energy Act does not preempt state tort law remedies); *Askew v. American Waterways Operators, Inc.*, 411 U.S. 325, 93 S.Ct. 1590, 1597, 36 L.Ed.2d 280 (1973) (Water Quality Improvement Act does not preempt state common-law claims for damages for oil spillage); *Ferebee v. Chevron Chem. Co.*, 736 F.2d

agrument on an FDA regulation, 21 C.F.R. § 201.105, which in the case of veterinary chloramphenicol requires, as part of the manufacturer's new animal drug application, a label approved by the FDA. Specifically, Rachelle argues that because the FDA regulation required it to use an FDA-approved label in order to escape criminal liability under the FDCA for dispensing a "misbranded" drug, it could not simultaneously comply with Texas tort law obligations that presumably mandated more extensive warnings than those provided in Rachelle's FDA-approved chloramphenicol label.

We find this argument unpersuasive in the present context. Unlike the FDA regulations from some products, the regulations pertaining to veterinary chloramphenicol did not set forth a particular mandatory label. Instead, the regulations required Rachelle to submit a proposed label of its own choosing, which the FDA would then approve or reject. *See* 21 C.F.R. Part 514 (New Animal Drug Applications); *id.* § 514.2(b)(3)(iii). Of special significance is the fact that the FDA regulations specifically permitted Rachelle to add additional warnings to a previously approved label as soon as it became aware of the necessity to do so — without any need

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1529, 1539–43 (D.C.Cir.), *cert. denied*, 469 U.S. 1062, 10 S.Ct. 545, 83 L.Ed.2d 432 (1984) (though Congress, via the Federal Insecticide, Fungicide, & Rodenticide Act, 7 U.S.C. §§ 136–136y, has precluded states from directly regulating the content of pesticide labels, state damage actions in tort based on the theory that the pesticide was inadequately labeled are not preempted); *Palmer V. Liggett Group, Inc.*, 633 F.Supp. 1171 (D.Mass. 1986) (mandatory exclusive cigarette label warnings of Federal Cigarette Labeling & Advertising Act, 15 U.S.C. §§ 1331–1341, held not to preempt state tort actions for failure to warn). *See also Grocery Mfrs. of America, Inc. v. Gerace*, 755 F.2d 993 (2d Cir.), *cert. denied*, ___ U.S. ___, 106 S.Ct. 69, 88 L.Ed.2d 56 (1985); *Cosmetic Toiletry & Fragrance Ass'n v. State of Minnesota*, 440 F.Supp. 1216 (D.Minn.1977), *aff'd*, 575 F.2d 1256 (8th Cir.1978).

to first obtain FDA approval of the supplemental warnings. 21 C.F.R. § 514.8.[4] The FDA regulations thus did not prevent Rachelle from adding to its label warnings of the dangers of fatal blood diseases associated with exposure to chloramphenicol as soon as it learned of such dangers.[5] We therefore conclude that federal law neither made it practically (nor

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[4] Once the FDA approves a drug manufacturer's application to market an animal drug, 21 C.F.R. § 514.8 allows the manufacturer to propose changes in the terms of its application by submitting a "supplemental new animal drug application." Although section 514.8 generally precludes the manufacturer from placing proposed changes into effect prior to formal FDA approval of the supplemental application, subsections (d) and (e) expressly exempt from this requirement changes to package labeling to provide additional warnings:

> "(d) Changes of the following kind proposed in supplemental new animal drug applications should be placed into effect at the earliest possible time:
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> "(1) The addition to package labeling, promotional labeling, and prescription drug advertising of additional warning, contraindication, side effect, and precautiion information.
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> "...
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> "(e) The Food and Drug Administration will take no action against a new animal drug or applicant solely because changes of the kinds described in paragraph (d) of this section are placed into effect by the applicant prior to his receipt of a written notice of approval of the supplemental new animal drug application if [certain notice and consistency] conditions are met."

[5] *Accord Feldman v. Lederle Laboratories*, 97 N.J. 429, 479 A.2d 374, 390 (1984) (reaching same conclusion in context of human antibiotic tetracycline). *But cf. Hurley v. Lederle Laboratories*, 651 F.Supp. 993 (E.D.Tex.1986) (holding tort claim for failure to warn of dangers associated with DPT vaccine preempted by FDA regulations that prohibited manufacturer from using or changing label or package insert without prior FDA approval, *see* 21 C.F.R. § 601.12).

legally) impossible, nor would it have posed an obstacle to accomplishing the objectives of the FDCA, for Rachelle to give warnings that would have satisfied its duty under Texas law. Since Rachelle has not convinced us that the FDA regulations actually conflict with its duty to warn under Texas law, or that Congress intended to exclusively occupy the field presented by the Osburns' claims, we reject Rachelle's preemption challenge.

II. Scope of Rachelle's Duty to Warn

[4] Rachelle's second agrument is that the district court erroneously instructed the jury that Rachelle had a duty under Texas law to warn "law users," such as Osburn, of the dangers associated with chloramphenicol. According to Rachelle, since veterinary chloramphenicol is a "prescription drug" (*i.e.*, a drug available only from veterinarians), under the "learned intermediary" doctrine Rachelle's duty to warn ran only to the prescribing veterinarian. This doctrine, recognized by Texas courts, provides that "when a [prescription] drug manufacturer properly warns a prescribing physician of the dangerous propensities of its product, the manufacturer is excused from warning each patient who receives the drug." *Alm v. Aluminum Co. of America*, 717 S.W.2d 588, 591 (Tex. 1986); *see also Reyes v. Wyeth Laboratories*, 498 F.2d 1264, 1275-76 (5th Cir.) *cert. denied*, 419 U.S. 1096, 95 S.Ct. 687, 42 L.Ed.2d 688 (1974); *Gravis v. Parke-Davis & Co.*, 502 S.W.2d 863, 870 (Tex.Civ.App. — Corpus Christi 1973, writ ref'd n.r.e.). The manufacturer's duty is satisfied because the doctor is expected to be a "learned intermediary," communicating between the manufacturer and the consumer. *Koonce v. Quaker Safety Prods. & Mfg. Co.*, 798 F.2d 700, 717 (5th Cir.1986); *Reyes*, 498 F.2d at 1276. However, as the Texas Supreme Court has recently emphasized, the "mere presence" of an intermediary does not excuse the manufacturer

of its duty to warn ultimate users; "[t]he issue in every case is whether the original manufacturer has a reasonable assurance that its warning will reach those endangered by the use of the product." *Alm*, 717 S.W.2d at 591.

We do not think Texas courts would apply this doctrine in the case before us. In the prescription drug context, the rationale underlying the learned intermediary doctrine is that by virtue of his medical expertise, a physician has knowledge not only of the dangerous propensities of drugs, but also of the particular "susceptibilities of his patients[s]." *Reyes*, 498 F.2d at 1276. The doctrine therefore applies to some extent because the doctor, armed with such knowledge, is able to make an informed choice about whether to prescribe a drug to a particular patient and about what risks should be communicated to that patient.

Although a veterinarian receives training in pharmacology, his "patients" are animals rather than humans. A veterinarian, therefore, can be expected to have knowledge of the particular susceptibilities of the *animals* he treats, or of *animals* generally, but not of those of persons, by definition not under his care, either in general or who happen to obtain from the veterinarian a prescription drug to be used in treatment of an animal. Hence, it may have been reasonable for Rachelle to expect Dr. Swain to have particular expertise and knowledge concerning the dangers *to animals* involved in the use of chloramphenicol and thus to communicate those dangers to persons who will directly administer the drug to an animal. But it seems unreasonable to expect a veterinarian such as Dr. Swain to have the medical expertise necessary to make him in all instances a "learned" intermediary with regard to dangers to *humans* who are exposed to a drug in the

process of administering it to animals.[6] At least this is so where, as here, the drug is properly dispensed for subsequent use by animal owners away from the direct supervision of the prescribing veterinarian.[7] We therefore reject Rachelle's argument that the learned intermediary doctrine should apply and consequently, its challenge to the district court's instructions regarding the scope of Rachelle's duty to warn.

III. Sufficiency of Causation Evidence

A. Standard of review

[5] Another of Rachelle's arguments is that the testimony offered by the Osburns' medical experts was legally insufficient to support the jury finding that Mr. Osburn's leukemia was caused by his exposure to chloramphenicol.

Even though this is a diversity case, a federal rather than a state law standard governs the determination whether suffi-

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[6] *Cf. Haste v. American Home Prods. Corp.*, 577 F.2d 1122 (10th Cir.), *cert. denied*, 439 U.S. 955, 99 S.Ct. 353, 58 L.Ed.2d 346 (1978) (manufacturer satisfied duty by warning prescribing veterinarian of health risks to *animals* vaccinated by their owners with its prescription vaccine).

[7] The situation here is perhaps distinct from one where a veterinarian personally administers a drug to an animal, and a danger exists to persons expected to come in contact with the animal. In this latter context, the veterinarian at least controls exposure to the drug by his patient, the animal. The veterinarian then has only to communicate dangers running from the animal he treated to persons exposed to the animal. We likewise do not speak to the situation where an employee of the veterinarian comes into contact with the drug while administering it to animals in the course of his employment pursuant to the prescription and under the general supervision of the veterinarian. The types of cases mentioned in this footnote are not before us, and we intimate no view as to any of them.

cient evidence was presented to defeat a motion for directed verdict. *See Boeing Co. v. Shipman*, 411 F.2d 365, 368-69 (5th Cir.1969) (en banc). Under the *Boeing* standard, a federal court is required to look at all the evidence presented, to view it in the light most favorable to the nonmoving party, and to draw all reasonable inferences in that party's favor. *Id.* at 374. The motions should be denied if "substantial evidence" opposes them, "that is, evidence of such quality and weight that reasonable and fair-minded men in the exercise of impartial judgment might reach different conclusions." *Id.* Therefore, unless the evidence pointed so strongly and overwhelmingly in favor of Rachelle that reasonable persons could not arrive at a contrary verdict, the district court was obligated to deny Rachelle's motions. On appeal we apply the same standard. *See, e.g., Dawsey v. Olin Corp.*, 782 F.2d 1254, 1261 (5th Cir.1986).

B. Causation evidence

Rachelle acknowledges that chloramphenicol is known to produce toxic effects on blood, including suppression of blood-forming activity in the bone marrow (aplastic anemia) and uncontrollable growth of abnormal blood cells (leukemia). Rachelle contends, however, that available scientific data has shown that chloramphenicol causes leukemia only where it has first caused aplastic anemia. In this case, Osburn was never diagnosed as having aplastic anemia, but approximately eighteen months after he began administering chloramphenicol to cattle, he received a diagnosis of chronic myelogenous leukemia. From this absence of a diagnosis of aplastic anemia, Rachelle draws the conclusion that Osburn did not have the disease and, therefore, that since there is no generally accepted theory in the medical community that chloramphenicol can cause leukemia without first causing

aplastic anemia, there was insufficient evidence that exposure to chloramphenicol caused Osburn's leukemia.

[6] After reviewing the record in the light most favorable to the Osburns, as *Boeing* requires, we conclude that reasonable persons could find that exposure to chloramphenicol caused Osburn's leukemia. The evidence reflected that Osburn had been in good health until shortly before his initial 1984 leukemia diagnosis and had no known exposure to other agents thought to be possible causes of leukemia. July 1980 blood tests were normal. The Osburns presented two well-qualified medical experts who testified at length about causation.[8] These physicians, Dr. Benowitz and Dr. Comstock,

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[8] The Osburns' principal experts concerning causation were Dr. Neil Benowitz and Dr. Eric Comstock. Dr. Benowitz is chief of the Clinical Pharmacology and Experimental Therapeutics Division of the University of California School of Medicine in San Francisco. He also heads the Adverse Drug Reaction Surveillance Committee for Northern California, which oversees diagnosis and management of drug toxicities and adverse reactions throughout the region. His primary research area is toxicology, which is the diagnosis and study of the toxic effects of drugs or chemicals on the human body. He has authored numerous book chapters and articles in this area, although his research has not specifically involved the drug chloramphenicol. He is board certified in internal medicine and medical toxicology. Since 1974 he has also served as assistant chief of the Clinical Pharmacology- Toxicology Unit at the San Francisco General Hospital Medical Center, and in this capacity is commonly called upon to analyze possible drug-induced diseases and other drug reactions in patients. Dr. Benowitz has also on several occasions been retained by the Federal Workers' Compensation Board specifically to anlayze possible cause and effect relationships between drugs and blood diseases, including benzene induced leukemia. Dr. Comstock is a board certified medical toxicologist and an assistant professor of medicine at the Baylor College of Medicine in Houston, Texas. He is a licensed, practicing physician with a previous M.A. in bio-

testified that, in their opinion, chloramphenicol-induced leukemia need not be preceded by aplastic anemia. Both doctors also gave the opinion that, to a reasonable degree of medical certainty, Osburn's leukemia was caused by his exposure to veterinary chloramphenicol.[9]

Rachelle does not challenge the qualifications of these experts nor the admissibility under the Federal Rules of Evidence of their opinions about causation. Rachelle merely argues that because the notion that chloramphenicol can cause leukemia without first causing aplastic anemia has not been widely accepted in the medical field, the opinions of the Osburns' experts that Mr. Osburn's leukemia was caused by exposure to chloramphenicol provide insufficient evidence of causation.

[7] This argument misses the point. An expert's opinion need not be generally accepted in the scientific community before it can be sufficiently reliable and probative to support a jury finding. *See Wells v. Ortho Pharmaceutical Corp.*, 788 F.2d 741, 744-45 (11th Cir.), *cert. denied*, — U.S. —, 107 S.Ct. 437, 93 L.Ed.2d 386 (1986); *Ferebee v. Chevron Chem. Co.*, 736

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chemistry. Since 1972, he has also been an adjunct professor of pharmacology at the University of Texas Medical School. Dr. Comstock has done extensive research on toxic effects of chemicals, particularly asbestos-based substances.

[9] Moreover, Dr. Benowitz testified that it was entirely possible that Osburn had suffered from aplastic anemia prior to being diagnosed with leukemia. Since Osburn saw no doctor between the time he started handling chloramphenicol and the time he received the leukemia diagnosis eighteen months later, Dr. Benowitz believed he could easily have suffered from chloramphenicol-induced aplastic anemia during the interim. Dr. Benowitz's testimony thus contradicts Rachelle's assumption that Osburn's leukemia was not in fact preceded by aplastic anemia.

F.2d 1529, 1535 (D.C.Cir.), *cert. denied*, 469 U.S. 1062, 105 S.Ct. 545, 83 L.Ed.2d 432 (1984); *Marder v. G.D. Searle & Co.*, 630 F.Supp. 1087, 1093-94 (D. Md.1986). What is necessary is that the expert arrived at his causation opinion by relying upon *methods* that other experts in his field would reasonably rely upon in forming their own, possibly different opinions, about what caused the patient's disease. *See generally* Fed.R.Evid. 703; *Barrel of Fun, Inc. v. State Farm Fire & Cas. Co.*, 739 F.2d 1028 (5th Cir.1984). Thus, medical expert opinion testimony that is controversial in its conclusions can support a jury finding of causation as long as the doctor's conclusory opinion is based upon well-founded methodologies. *Ferebee*, 736 F.2d at 1535.[10]

[8] The medical experts' opinions in this case meet this requirement. In reaching the opinion that Osburn's exposure to chloramphenicol caused his leukemia, the Osburns' medical experts relied upon their particular areas of expertise, the characteristics of Mr. Osburn's individual case, as presented in his medical records, and scientific studies and case histories reported in the generally accepted medical literature that suggested an association between chloramphenicol and blood disorders, including leukemia.[11] These are methodolo-

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[10] We do not suggest that this approach be carried to extremes — to, for example, the denial of gravity or the like. But nothing remotely of that kind is involved here. Nor are we in the area of pure theoretical speculation. Rather, this case involves a situation where science has some meaningful information but scientific "truth" has not so completely hardened as to prevent legitimate difference of true expert opinion in a particular concrete context.

[11] The medical literature documenting an association between chloramphenicol and blood disorders that the Osburn's experts principally relied upon was as follows:

(1) Fraumeni, *Bone Marrow Depression Induced by Chloramphenicol or Phenylbutazone: Leukemia and Other Sequelae*, 201 J.A.

gies concededly relied upon generally by physicians in diagnosing etiology of a particular patient's disease. *See, e.g., Wells,* 788 F.2d at 744-45; *Ferebee,* 736 F.2d at 1535-36.

Rachelle of course introduced its own experts, who were of the view that Mr. Osburn's leukemia was not caused by chloramphenicol, but the testimony of those witnesses was not so overwhelming that the jury had to accept it. Rachelle's experts relied on essentially the same diagnostic methodologies; they simply drew the opposite conclusion from the

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M.A. 150 (1967). Dr. Fraumeni conducted the only long-term follow-up study of the effects of chloramphenicol. He received information concerning 124 patients listed in the American Medical Association's Registry of Adverse Drug Reactions and an additional six patients not listed but who had been treated by physicians of listed patients. Of these 130 patients, six cases of leukemia subsequent to chloramphenicol exposure were discovered. After discounting the three reports of leukemia from the six nonlisted patients, Dr. Fraumeni reported a chloramphenicol-induced leukemia ratio of 3/124, compared to the United States age-adjusted annual leukemia mortality ratio of 6/100,000.

(2) Swanson & Cook, *Blood, Chemicals and Blood Dyscrasias* (1977). Dr. Comstock testified that this treatise represented the most comprehensive review then available of the medical literature dealing with blood disorders associated with drugs or chemicals. He said the treatise listed 19 drugs that had been associated with a total of 271 case reports of leukemia thought to be drug-induced. Of these 271 cases, 160 were associated with benzene exposure, 53 with phenylbutazone, and 34 with chloramphenicol. The remaining 24 cases were associated with 16 other drugs, with no more than four of these cases being linked to any one particular drug. In Dr. Comstock's view, the treatise indicated that chloramphenicol was among the three drugs sufficiently associated with leukemia to be considered causally related to the disease.

(3) A 1981 case report in the *Lancet Medical Journal* of a shepherd who suffered from aplastic anemia after administering veterinary chloramphenicol to sheep.

available information. The case thus presented a *bona fide* "battle of the experts" — real, not merely testifying, experts who applied their true expertise — in which a jury must be allowed to make credibility determinations and weigh the conflicting evidence in order to decide the likely truth of a matter not itself initially resolvable by common knowledge or lay reasoning. *Ferebee*, 736 F.2d at 1535; *accord Wells*, 788 F.2d at 745.[12] We therefore reject Rachelle's challenge to the sufficiency of the evidence concerning causation.[13]

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[12] *See also Certain-Teed Prods. Corp.*, 574 S.W.2d 910 (Kent.Ct.App.1978) (doctor's opinion that benzene caused plaintiff's aplastic anemia sufficient evidence to support Kentucky Workmen's Compensation Board's finding); *Logan Co. v. Amic*, 479 S.W.2d 1 (Kent.1972) (doctor's opinion that benzene caused plaintiff's leukemia was competent evidence of causation, but not so compelling as to make that conclusion the only reasonable one).

[13] Rachelle further contends that Dr. Benowitz's opinion cannot support a finding of causation because, according to Rachelle, the opinion was based on speculation rather than on any theory backed by scientific data. In making this argument, Rachelle confuses Dr. Benowitz's basis for his conclusion that chloramphenicol caused Mr. Osburn's leukemia with his "aberrant metabolism" theory of the underlying biochemical process that characterizes the disease formation. Dr. Benowitz described what he believed to be the mechanism by which drugs generally thought to cause leukemia (such as benzene and chloramphenicol) have this effect. He said that before the body excretes them, drugs are often converted to other substances called metabolites. Although usually inactive, the metabolites created by some drugs, in some people, are "reactive." Dr. Benowitz believed that chloramphenicol causes some people to produce reactive metabolites and that these metabolites stop the production of normal blood cells, thereby causing aplastic anemia, and promote development of abnormal cells, causing leukemia. Apparently, this theory, which is based on work done by Dr. Adele Yunis, has not yet been supported by scientific data. If Dr. Benowitz's opinion of

IV. Newly Discovered Evidence

[9] Rachelle next complains that the district court erroneously denied its motion for new trial, which it asked for on the basis of newly discovered evidence. Pursuant to Rules 59 and 61 of the Federal Rules of Civil Procedure, the district court has discretion to grant a new trial on this ground.[14] *Johnston v. Lucas*, 786 F.2d 1254, 1257 (5th Cir.1986); *La Fever, Inc. v. All-Star Ins. Corp.*, 571 F.2d 1367, 1368 (5th Cir.1978). We will not disturb the denial of such a motion unless we find a clear abuse of that discretion. *La Fever*, 571 F.2d at 1368. We have said that in deciding whether to grant

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causation were based solely on this theory, therefore, Rachelle might be correct that Dr. Benowitz's opinion could not provide the requisite support for the jury's verdict. *See Thompson v. Southern Pacific Transp. Co.*, 809 F.2d 1167 (5th Cir. 1987); *Marder*, 630 F.Supp. at 1092-93; *In re Agent Orange Prod. Liability Litigation*, 611 F.Supp. 1223, 1262-63 (E.D.N.Y. 1985). We need not decide that question, however. Dr. Benowitz testified that his opinion was based upon the particular facts of Mr. Osburn's case, as contained in his medical records, and the medical literature showing an association between chloramphenicol and blood disorders, including the Fraumeni study and the criteria set forth therein for establishing a causal relationship. Dr. Benowitz's opinion of causation therefore constitutes competent evidence.

[14] Rachelle also agrues that the dictrict court abused its discretion in not granting a new trial on the basis of insufficient evidence of causation. We find this agrument unpersuasive. We have said that "[a] trial court should not grant a new trial on evidentiary grounds unless the verdict is against the great weight of the evidence." *Dotson v. Clark Equip. Co.*, 805 F.2d 1225, 1227 (5th Cir.1986); *cf. Dawsey v. Olin Corp.*, 782 F.2d 1254, 1262 (5th Cir.1986). For the reasons outlined in section III of our opinion, we conclude that the jury's verdict was sufficiently supported by the causation evidence presented by the Osburns. We therefore affirm the district court's denial of Rachelle's motion for new trial on this ground.

such a motion, the district court should "consider whether the new facts (1) would probably change the outcome; (2) could have been discovered earlier with due diligence; and (3) are merely cumulative or impeaching." *Johnston*, 786 F.2d at 1257; *see also La Fever*, 571 F.2d at 1368; *English v. Mattson*, 214 F.2d 406, 409 (5th Cir.1954).

The evidence in question here consists of medical records and affidavits from two physical examinations Osburn underwent in the summer of 1981 in order to obtain an ICC truck driver's permit. The records indicate that, in contradiction to Osburn's trial testimony that the physicians who examined him for the permit found his blood count to be normal, no blood tests were performed during these 1981 examinations. According to Rachelle, because Dr. Benowitz relied on Osburn's inaccurate testimony about the results of those physicals in reaching his opinion on causation, the subsequently discovered evidence "would probably have changed the outcome" of the trial.

Osburn's testimony of normal blood counts in 1981 was introduced to show that it was improbable that Osburn had contracted leukemia *prior* to his exposure to the chloramphenicol in 1982, and thus that nothing in Osburn's history suggested his leukemia was caused by something other than chloramphenicol. The absence of any evidence suggesting an "other cause" was stated by Dr. Benowitz to be one of the factors he considered in reaching his causation opinion; however, we do not think Dr. Benowitz would have changed his conclusion that no other causes were apparent had he known that no blood tests were performed on Osburn in 1981. The 1981 test results were just pieces of information that, combined with all the other facts that made up Osburn's medical history, led Dr. Benowitz to this conclusion. The record also contained evidence, for example, indicating that

blood tests performed in July 1980 were normal and that Osburn had no known exposure to any other chemicals thought to be associated with leukemia. The medical evidence of record also reflected that Osburn was in good health until shortly before he was diagnosed with leukemia in February 1984. Rachelle has thus not convinced us that the district court abused its discretion in determining that the new evidence was not such as would probably have changed the jury's verdict. Accordingly, we conclude that Rachelle's challenge to the district court's denial of its new trial motion lacks merit.

V. Damages

A. Period of loss of wage earning capacity

[10] The jury awarded Mr. Osburn a lump-sum verdict of $2,500,000. Rachelle challenges this award on two separate grounds. Rachelle first contends that because the evidence indicated Osburn had a life expectancy of only two to five years from date of diagnosis, the jury could not properly have awarded more than $50,000 at the very most for past and future loss of wage earning capacity. According to Rachelle, future loss of earning capacity must be calculated on the basis of actual life expectancy, given the injuries sued for, not on the basis of preinjury work life expectancy. Although this argument has some surface appeal, we find it ultimately unpersuasive.

In support of its argument, Rachelle cites a single Texas case, which held that plaintiffs suing under the Texas "survival statute" could recover for the decedent's lost earning capacity (and other damages) only through the date of his death. *See Norman v. Valley Gin Co.*, 99 S.W.2d 1065 (Tex.Civ.App.1936, writ ref'd). According to Rachelle, the Texas rule for survival actions, which allow heirs to recover

damages an injured party would have been entitled to recover had he lived, *see id.* at 1067, should apply equally to Osburn's claim for loss of future earning capacity.

We disagree. The reason that recovery in a survival action is limited to injuries suffered by the decedent only through the date of his death is that as of that date recovery is governed instead by the wrongful death action, which takes over and allows recovery for injuries suffered by the heirs as a result of the decedent's death. *Id.* at 1067 (reaching this conclusion on the basis of statutory ancestors to the current Texas wrongful death and survivorship action statutes); Tex.Civ.Prac. & Rem.Code Ch. 71 (Vernon 1986); *accord* 4 F. Harper, F. James & O. Gray, *The Law of Torts* § 24.6 at 474 & n. 12, and § 25.16 at 612–14 (2d ed. 1986). In contrast, the "prevailing American rule" is that when the plaintiff is the injured party himself (*i.e.*, when trial occurs before the injured party dies), he can recover lost earning capacity on the basis of work life expectancy at the time of his injury "*undiminished by any shortening of that expectancy as a result of the injury.*" 4 F. Harper, F. James & O. Gray, *supra*, § 24.6, at 475 (emphasis in original); *see also id.* § 25.8, at 551–52 n. 9; C. McCormick, *Handbook on the Law of Damages* 303 (1935).

No Texas case has expressly articulated this distinction, but it is consistent with Texas case law.[15] Since we see no reason why Texas would deviate from other jurisdictions in this regard, we assume the Texas Supreme Court would follow the majority rule. Consequently, we conclude that the jury was entitled to calculate Osburn's loss of future earning

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[15] Since no reported Texas case has addressed this precise issue, we must predict what the Texas Supreme Court would decide if presented with the question. *See Erie R.R. v. Tompkins*, 304 U.S. 64, 58 S.Ct. 817, 82 L.Ed. 1188 (1938); *Louisiana AFL-CIO v. Lanier Business Prods., Inc.*, 797 F.2d 1364, 1366 (5th Cir.1986).

capacity on the basis of the life expectancy Osburn would have had if he had not contracted leukemia.[16]

B. Excessiveness of damages

Finally, Rachelle attacks the jury's unitemized damage awards to the Osburns as excessive. The established rule in this Circuit is that we will not disturb a jury verdict for excessiveness except on the strongest of showings. *E.g., Johnson v. Michelin Tire Corp.*, 812 F.2d 200, 207 (5th Cir.1987); *Caldarera v. Eastern Airlines, Inc.*, 705 F.2d 778, 784 (5th Cir.1983). We have described the degree of excessiveness necessary for judicial intervention as an award so large " 'as to be contrary to right reason,' so exaggerated as to indicate 'bias, passion, prejudice, corruption, or other improper motive,' or as 'clearly exceeding[ing] that amount that *any* reasonable man could feel the claimant is entitled to.' " *Caldarera*, 705 F.2d at 784 (emphasis in original; citations omitted).

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[16] We note that this measure of damages for lost earning capacity tends to overcompensate because it makes no deduction for living expenses between the time of death and the time the plaintiff would have died had he not been injured. *See* F. Harper, F. James & O. Gray, *supra*, § 25.8 n. 9. In this regard it differs from the measure of damages in wrongful death actions, which does subtract such living expenses in calculating the contribution the decedent would have made to his heirs. *See id.* § 25.14. This is just a difference in the law regarding the two actions, however; it does not change the rule.

We further note that the present lawsuit of course bars any subsequent wrongful death (or survival) action against Rachelle founded upon Clois Osburn's death as a result of his referenced exposure to Mychel-Vet. *See Prosser and Keeton on Torts* § 127, at 955-56 (W. Keeton 5th ed. 1984).

In this case, the jury's general damage award of $2,500,000 to Mr. Osburn included the following elements: past and future loss of wage earning capacity, past medical expenses, physical pain and suffering, loss of physical capacity other than wage earning capacity, and mental anguish. We find that based on the evidence in this record, $2,500,000 exceeds the amount the jury could properly have awarded.

[11] Having determined that the award is excessive, we can either order a new trial on damages or allow plaintiffs the option of avoiding such a new trial by agreeing to a remittitur of the excessive portion of the award. *De Centeno v. Gulf Fleet Crews, Inc.*, 798 F.2d 138, 142 (5th Cir.1986); *Wells v. Dallas Indep. School District*, 793 F.2d 679, 683-84 (5th Cir.1986). This Court follows the maximum recovery rule, according to which remittitur can reduce a damages award only to "the maximum amount the jury could properly have awarded." *Zeno v. Great Atlantic & Pacific Tea Co.*, 803 F.2d 178, 181 (5th Cir.1986); *Caldarera*, 705 F.2d at 784. Where the district court used a general verdict interrogatory and instructed on several elements of damages, it is sometimes impossible to determine the reason the verdict was excessive. In that event, an appellate court may elect to grant a new trial without providing the option of remittitur. *See Gautreaux v. Insurance Company of North America*, 811 F.2d 908 (5th Cir.1987); *De Centeno*, 798 F.2d at 143; *In re Aircrash Disaster (Eymard v. Pan Am. World Airways)*, 795 F2.d 1230, 1235-36 (5th Cir.1986).

[12] In this case, however, we think a mandatory new trial on damages is unnecessary and that a remittitur is preferable. The jury verdict separated Mr. and Mrs. Osburn's damages. Although Mr. Osburn's award lumped together a number of elements, the amount the jury could properly have awarded — and very likely did award — for loss of earning

capacity and past medical expenses can be easily calculated on the basis of the evidence in the record.[17] Under the facts of this case, the other damages items upon which the jury was instructed — pain and suffering, mental anguish, and loss of physical capacity — are somewhat amalgamated by their very nature. For purposes of applying our maximum recovery rule, we are therefore able to consider them together. Since we can determine the proper amount for a remittitur in this case despite the district court's failure to submit special interrogatories to the jury on the individual items of damages, we elect not to require a new damages trial.

1. Damages for loss of earning capacity and medical expenses

[13] The uncontroverted evidence indicates that for the roughly two-year period between diagnosis and trial, Mr. Osburn lost one-half of his $20,000 annual earning capacity. He thus incurred a past loss of earning capacity totaling $20,000. On the basis of Osburn's twenty-year work life expectancy and $20,000 a year earning history, his future earning capacity can be estimated at $400,000.[18] Using a two percent below market discount rate in accordance with *Culver v. Slater Boat Co.*, 722 F.2d 114 (5th Cir.1983) (en banc), *cert. denied*, 469 U.S. 819, 105 S.Ct. 90, 83 L.Ed.2d 37 (1984) (*Culver II*), the present value of Osburn's future loss

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[17] We believe that this case is properly distinguished from *Gautreaux*, for there we noted that "on the record before us we cannot determine to what extent or in what amount Gautreaux's injury impairs his future earnings" and "we are completely unable to determine loss of future earnings." 811 F.2d at 915, 916.

[18] The parties stipulated that disregarding the diminution resulting from his leukemia, as of the date of trial Mr. Osburn had a work life expectancy of 19.7 years and a life expectancy of 29.8 years.

of earning capacity totals approximately (though slightly less than) $330,000. Adding to this figure the $20,000 for past lost earnings yields a sum of $350,000. Thus, we find that the maximum award permissible under the evidence for loss of past and future wage earning capacity is $350,000.

As the parties concede, the evidence also indicates that at the time of trial Osburn had paid $6,700 in medical expenses. No evidence was submitted regarding probable medical expenses in the future, and the jury was not instructed to consider that element of damages. The jury could therefore properly have awarded a maximum of $6,700 for medical expenses.

2. Pain and suffering, anguish, loss of physical capacity

Subtracting the above amounts from the jury's $2,500,000 award leaves $2,143,300. We cannot be certain that the jury awarded exactly the maximum permissible for earnings and medical expenses, although on this record it is very likely that it at least came quite close to doing so. However, we can with some confidence assume that its award on the remaining elements was in the neighborhood, at least, of the $2,143,300 left over after earnings and medical expenses are taken into account.

The evidence does not justify this approximately two million dollar award for the noneconomic portion of Osburn's losses. We have no doubt that Osburn has suffered and will continue to suffer until his death significant severe mental anguish as a result of the knowledge that his illness is terminal. The evidence shows also that he can no longer participate in his calf-roping hobby or enjoy other leisure activities he could previously perform. But, although he fatigues easily and will undoubtedly suffer pain as the disease progresses, there is no evidence that he will have to endure

the sort of continuing, excruciating pain that might support an award more nearly approaching this high sum.

Our task of determining the maximum amount a jury properly could award for these losses is more difficult. In a very real sense, there is no way to place a monetary value on a person's pain and suffering, especially where the agony is spread over an indefinite period of time. Most of us would not trade two or three million dollars fror Mr. Osburn's situation. That cannot be the measure, however, because few indeed would take *any* sum of money in exchange for severe terminal illness or impending death. Yet the very purpose of such damage awards is to affix dollar amounts for losses that cannot be measured in money. We must therefore exercise our best judgment and place some restraint on awards, for as Judge Rubin has said, "[t]he sky is simply not the limit for jury verdicts." *Caldarera*, 705 F.2d at 784.

Based on the evidence in this record and on the rough guidance provided by awards affirmed by this Court for similar injuries,[19] we believe that an award of $1,500,000 is the most a jury could properly have for Osburn's non-economic losses. Applying our maximum recovery rule, we thus conclude that the total permissible award to Mr. Osburn is $1,856,700. Deducting from this sum the fifteen percent liability attributable to Anchor, the total permissible amount

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[19] *See Dixon v. International Harvester Co.*, 754 F.2d 573 (5th Cir.1985) (finding maximum permissible award of $750,000 for pain and suffering to plaintiff who suffered thirty minutes of intense pain while pinned by pine sapling that jutted into the tractor cab he was driving, and substantial physical and psychological pain for the remaining two and a half years until he died for unrelated reasons); *Sosa v. M/V Lago Izabel*, 736 F.2d 1028 (5th Cir.1984) (opining that one million dollars approached maximum for pain and suffering to seaman who was burned on eighty percent of his body surface).

of damages owed to Osburn by Rachelle is $1,578,195. Accordingly, we order a new trial on the issue of Mr. Osburn's damages, unless he will agree to a remittitur to this amount.

3. Mrs. Osburn's damages

[14] In response to the district court's instruction that if proven by a preponderance of the evidence, the jury could consider damages to Mrs. Osburn for loss of her husband's love and affection and for loss of his household services, the jury awarded Mr. Osburn a lump-sum verdict of $500,000. Rachelle challenges this award as excessive as well. We conclude, however, that although it closely approaches the maximum the jury could have properly awarded, it is not excessive.[20] The evidence indicates that Mr. and Mrs. Osburn enjoyed a close, loving relationship and that they remained happy together after almost twenty years of marriage. With regard to Mrs. Osburn's loss of her husband's household services, she testified that Mr. Osburn performed many chores for her and the family. Since the Osburns live in a rural environment, the value of those services may be greater than in an urban setting. We therefore sustain the jury's $500,000 award to Mrs. Osburn.[21]

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[20] *See In re Air Crash Disaster (Giancontieri v. Pam Am. World Airways, Inc.)*, 767 F.2d 1151 (5th Cir.1985) (under facts of case, $500,000 was maximum for loss of love and affection of wife and $200,000 was within maximum for loss of her household services); *Winbourne v. Eastern Airlines, Inc.*, 758 F.2d 1016 (5th Cir.1984) (affirming $500,000 award for loss of wife's love and affection).

[21] We have some question about whether the portion of Mrs. Osburn's award that compensates for her economic loss duplicates the losses for which Mr. Osburn recovered. But the jury was not instructed about any potential duplication and the issue has not been briefed or argued to us. Accordingly, we take no cognizance of it.

Conclusion

The district court shall order a new trial on Mr. Osburn's claims for damages unless Mr. Osburn agrees, within the time specified by the district court following remand, to a remittitur of the award to $1,578,195. We therefore vacate the damage award to Clois Osburn, and in all other respects affirm the judgment below. We remand the cause for further proceedings consistent with this opinion.

AFFIRMED in part, VACATED in part, and REMANDED.

Adm. Office, U.S. Courts —
West Publishing Company, Saint Paul, Minn.

Clois OSBURN and Anita Osburn,
Plaintiffs-Appellees,

v.

ANCHOR LABORATORIES, INC.,
Defendant,

Rachelle Laboratories, Inc.,
Defendant-Appellant.

No. 86-1094.

United States Court of Appeals,
Fifth Circuit.

Dec. 3, 1987.

G. Luke Ashley, Thompson & Knight, Dallas, Tex., for defendant-appellant.

Dale D. Williams, Rod S. Squires, Williams, Pattillo & Squires, Waco, Tex., for plaintiffs-appellees.

Appeal from the United States District Court for the Western District of Texas.

Before WISDOM, RUBIN and GARWOOD, Circuit Judges.

ON PETITION FOR REHEARING

PER CURIAM:*

IT IS ORDERED that the motion of Anita Osburn, plaintiff, for entry of an order substituting Anita Osburn, Independent Executrix of the Estate of Clois Dale Osburn, deceased, as a party-plaintiff in place of Clois Dale Osburn, deceased, is GRANTED.

IT IS FURTHER ORDERED that appellant's petition for rehearing is DENIED. With respect to appellant's assertion that "[t]he Court's opinion is totally silent as to whether the

Court's ruling affects the potential recovery now available to Mr. Osburn's heirs under the Texas wrongful death statute," attention is directed to the last paragraph of footnote 16 of our opinion herein.

No further petition for rehearing shall be filed, and the mandate shall issue forthwith.

§ 201.105 Veterinary drugs.

A drug intended for veterinary use which, because of toxicity or other potentiality for harmful effect, or the method of its use, is not safe for animal use except under the supervision of a licensed veterinarian, and hence for which "adequate directions for use" cannot be prepared, shall be exempt from section 502(f)(1) of the act if all the following conditions are met.

(a) The drug is:

(1) In the possession of a person (or his agents or employees) regularly and lawfully engaged in the manufacture, transportation, storage, or wholesale or retail distribution of veterinary drugs and is to be sold only to or on the prescription or other order of a licensed veterinarian for use in the course of his professional practice; or

(2) In the possession of a licensed veterinarian for use in the course of his professional practice.

(b) The label of the drug bears:

(1) The statement "Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian"; and

(2) The recommended or usual dosage; and

(3) The route of administration, if it is not for oral use; and

(4) The quantity or proportion of each active ingredient as well as the information required by section 502(e) of the act; and

(5) If it is for other than oral use, the names of all inactive ingredients, except that:

(i) Flavorings and perfumes may be designated as such without naming their components.

(ii) Color additives may be designated as coloring without naming specific color components unless the naming of such components is required by a color additive regulation prescribed in Subchapter A of this chapter.

(iii) Trace amounts of harmless substances added solely for individual product identification need not be named.

If it is intended for administration by parenteral injection, the quantity or proportion of all inactive ingredients, except that ingredients added to adjust the pH or to make the drug isotonic may be declared by name and a statement of their effect; and if the vehicle is water for injection, it need not be named.

(6) An identifying lot or control number from which it is possible to determine the complete manufacturing history of the package of the drug;

Provided, however, That in the case of containers too small or otherwise unable to accommodate a label with sufficient space to bear all such information, but which are packaged within an outer container from which they are removed for dispensing or use, the information required by paragraphs (b)(2), (3), and (5) of this section may be contained in other labeling on or within the package from which it is to be so dispensed, and the information referred to in paragraph (b)(1) of this section may be placed on such outer container only, and the information required by paragraph (b)(6) of this section may be on the crimp of the dispensing tube.

(c)(1) Labeling on or within the package from which the drug is to be dispensed bears adequate information for its use, including indications, effects, dosages, routes, methods, and frequency and duration of administration, and any relevant hazards, contraindications, side effects, and precautions under which veterinarians licensed by law to administer the

drug can use the drug safely and for the purposes for which it is intended, including all purposes for which it is advertised or represented; and

(2) If the article is subject to section 512 of the act, the labeling bearing such information is the labeling authorized by the approved new animal drug application or required as a condition for the certification or the exemption from certification requirements applicable to preparations of antibiotic drugs: *Provided, however,* That the information required by paragraph (c)(1) of this section may be omitted from the dispensing package if, but only if, the article is a drug for which directions, hazards, warnings, and use information are commonly known to veterinarians licensed by law to administer the drug. Upon written request, stating reasonable grounds therefore, the Commissioner will offer an opinion on a proposal to omit such information from the dispensing package under this proviso.

(d) Any labeling, as defined in section 201(m) of the act, whether or not it is on or within a package from which the drug is to be dispensed, distributed by or on behalf of the manufacturer, packer, or distributor of the drug, that furnishes or purports to furnish information for use or which prescribes, recommends, or suggests a dosage for the use of the drug (other than dose information required by paragraph (b)(2) of this section and § 201.100(b)(2)) contains:

(1) Adequate information for such use, including indications, effects, dosages, routes, methods, and frequency and duration of administration, and any relevant warnings, hazards, contraindications, side effects, and precautions, and including information relevant to compliance with the new animal drug provisions of the act, under which veterinarians licensed by law to administer the drug can use the drug safely and for the purposes for which it is intended, including all

conditions for which it is advertised or represented; and if the article is subject to section 512 of the act, the parts of the labeling providing such information are the same in language and emphasis as labeling approved or permitted under the provisions of section 512, and any other parts of the labeling are consistent with and not contrary to such approved or permitted labeling; and

(2) The same information concerning the ingredients of the drug as appears on the label and labeling on or within the package from which the drug is to be dispensed;

Provided, however, That the information required by paragraphs (d)(1) and (2) of this section is not required on the so-called reminder-piece labeling which calls attention to the name of the drug but does not include indications or dosage recommendations for use of the drug.

(e) All labeling, except labels and cartons, bearing information for use of the drug also bears the date of the issuance or the date of the latest revision of such labeling.

(f) A prescription drug intended for both human and veterinary use shall comply with paragraphs (e) and (f) of this section and § 201.100.

[40 FR 13998, Mar. 27, 1975, as amended at 42 FR 15674, Mar. 22, 1977]

§ 510.55 Labeling requirements for antibiotic drugs for animal use.

If an antibiotic drug is subject to section 512(n) of the Act and packaged for dispensing:

(a) It shall be labeled in accordance with the requirements prescribed by § 201.105 of this chapter and each package shall include information containing directions and warnings adequate for the veterinary use of the drug by the laity in lieu of the statement "Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian" (as provided in § 201.105(b)(1) of this chapter) unless such statement is required by regulations issued under section 512(i) of the Act.

(b) Its labeling shall bear any additional information required for the drug by specific regulations.

(c) Each package shall bear on its outside wrapper or container and the immediate container an expiration date prescribed for the drug as provided in § 432.5(a)(3) of this chapter with the exception provided in § 432.5(c) of this chapter.

(d) If it is intended for udder instillation in cattle, it shall be exempt from the requirements of § 201.105(b)(5) of this chapter.

(Sec. 507, 59 Stat. 468 as amended (21 U.S.C. 357))

Subpart A — General Provisions

§ 514.1 Applications.

(a) Applications to be filed under section 512(b) of the act shall be submitted in the form described in paragarph (b) of this section. If any part of the application is in a foreign

language, an accurate and complete English translation shall be appended to such part. Translations of literature printed in a foreign language shall be accompanied by copies of the original publication. The application must be signed by the applicant or by an authorized attorney, agent, or official. If the applicant or such authorized representative does not reside or have a place of business within the United States, the application must also furnish the name and post office address of, and must be countersigned by, an authorized attorney, agent, or official residing or maintaining a place of business within the United States. Pertinent information may be incorporated in, and will be considered as part of, an application on the basis of specific reference to such information, including information submitted under the provisions of § 511.1 of this chapter, in the files of the Food and Drug Administration; however, the reference must be specific in identifying the information. Any reference to information furnished by a person other than the applicant may not be considered unless its use is authorized in a written statement signed by the person who submitted it.

(b) Applications for new animal drugs shall be submitted in triplicate and assembled in the manner prescribed by paragraph (b)(15) of this section, and shall include the following information:

(1) *Identification.* Whether the submission is an original or supplemental application; the name and the address of the applicant; the date of the application; the trade name(s) (if one has been proposed) and chemical name(s) of the new animal drug. Upon receipt, the application will be assigned a number NADA _____, which shall be used for all correspondence with respect to the application.

(2) *Table of contents and summary.* The application shall be organized in a cohesive fashion, shall contain a table of

contents which identifies the data and other material submitted, and shall contain a well-organized summary and evaluation of the data in the following form:

(i) Chemistry:

(*a*) Chemical structural formula or description for any new animal drug substance.

(*b*) Relationship to other chemically or pharmacologically related drugs.

(*c*) Description of dosage form and quantitative composition.

(ii) Scientific rationale and purpose the new animal drug is to serve:

(*a*) Clinical purpose.

(*b*) Highlights of laboratory studies: The reasons why certain types of studies were done or omitted as related to the proposed conditions of use and to information already known about this class of compounds. Emphasize any unusual or particularly significant pharmacological effects or toxicological findings.

(*c*) Highlights of clinical studies: The rationale of the clinical study plan showing why types of studies were done, amended, or omitted as related to laboratory studies and prior clinicial experience.

(*d*) Conclusions: A short statement of conclusions combining the major points of effectiveness and safety as they relate to the use of the new animal drug.

(3) *Labeling.* Three copies of each piece of all labeling to be used for the article (total of 9).

(i) All labeling should be identified to show its position on, or the manner in which it is to accompany the market package.

(ii) Labeling for nonprescription new animal drugs should include adequate directions for use by the layman under all conditions of use for which the new animal drug is intended, recommended, or suggested in any of the labeling or advertising sponsored by the applicant.

(iii) Labeling for prescription veterinary drugs should bear adequate information for use under which veterinarians can use the new animal drug safely and for the purposes for which it is intended, including those purposes for which it is to be advertised or represented, in accord with § 201.105 of this chapter.

(iv) All labeling for prescription or nonprescription new animal drugs shall be submitted with any necessary use restrictions prominently and conspicuously displayed.

(v) Labeling for new animal drugs intended for use in the manufacture of medicated feeds shall include:

(*a*) Specimens of labeling to be used for such new animal drug with adequate directions for the manufacture and use of finished feeds for all conditions for which the new animal drug is intended, recommended, or suggested in any of the labeling, including advertising, sponsored by the applicant. Ingredient labeling may utilize collective names as provided in § 501.110 of this chapter.

(*b*) Representative labeling proposed to be used for Type B and Type C medicated feeds containing the new animal drug.

(vi) Draft labeling may be submitted for preliminary consideration of an application. Final printed labeling will ordi-

narily be required prior to approval of an application. Proposed advertising for veterinary prescription drugs may be submitted for comment or approval.

(4) *Components and composition.* A complete list of all articles used for production of the new animal drug including a full list of the composition of each article:

(i) A full list of the articles used as components of the new animal drug. This list should include all substances used in the synthesis, extraction, or other method of preparation of any new animal drug and in the preparation of the finished dosage form, regardless of whether they undergo chemical change or are removed in the process. Each component should be identified by its established name, if any, or complete chemical name, using structural formulas when necessary for specific identification. If any proprietary name is used, it should be followed by a complete quantitative statement of composition. Reasonable alternatives for any listed component may be specified.

(ii) A full statement of the composition of the new animal drug. The statement shall set forth the name and amount of each ingredient, whether active or not, contained in a stated quantity of the new animal drug in the form in which it is to be distributed (for example, amount per tablet or milliliter) and a batch formula representative of that to be employed for the manufacture of the finished dosage form. All components should be included in the batch formula regardless of whether they appear in the finished product. Any calculated excess of an ingredient over the label declaration should be designated as such and percent excess shown. Reasonable variation may be specified.

(iii) If it is a new animal drug produced by fermentation:

(*a*) Source and type of microorganism used to produce the new animal drug.

(*b*) Composition of media used to produce the new animal drug.

(*c*) Type of precursor used, if any, to guide or enhance production of the antibiotic during fermentation.

(*d*) Name and composition of preservative, if any, used in the broth.

(*e*) A complete description of the extraction and purification processes including the names and compositions of the solvents, precipitants, ion exchange resins, emulsifiers, and all other agents used.

(*f*) If the new animal drug is produced by a catalytic hydrogenation process (such as tetracycline from chlortetracycline), a complete description of each chemical reaction with graphic formulas used to produce the new animal drug, including the names of the catalyst used, how it is removed, and how the new animal drug is extracted and purified.

(5) *Manufacturing methods, facilities, and controls.* A full description of the methods used in, and the facilities and controls used for, the manufacture, processing, and packing of the new animal drug. This description should include full information with respect to any new animal drug in sufficient detail to permit evaluation of the adequacy of the described methods of manufacture, processing, and packing, and the described facilities and controls to determine and preserve the identity, strength, quality, and purity of the new animal drug, and the following:

(i) If the applicant does not himself perform all the manufacturing, processing, packaging, labeling, and control operations for any new animal drug, he shall: Identify each person

who will perform any part of such operations and designate the part; and provide a signed statement from each such person fully describing, directly or by reference, the methods, facilities, and controls he will use in his part of the operation. The statement shall include a commitment that no changes will be made without prior approval by the Food and Drug Administration, unless permitted under § 514.8.

(ii) A description of the qualifications, including educational background and experience, of the technical and professional personnel who are responsible for assuring that the new animal drug has the identity, strength, quality, and purity it purports or is represented to possess, and a statement of their responsibilities.

(iii) A description of the physical facilities including building and equipment used in manufacturing, processing, packaging, labeling, storage, and control operations.

(iv) The methods used in the synthesis, extraction, isolation, or purification of any new animal drug. When the specifications and controls applied to such new animal drugs are inadequate in themselves to determine its identity, strength, quality, and purity, the methods should be described in sufficient detail, including quantities used, times, temperature, pH, solvents, etc., to determine these characteristics. Alternative methods or variations in methods within reasonable limits that do not affect such characteristics of the new animal drug may be specified. A flow sheet and indicated equations should be submitted when needed to explain the process.

(v) Precautions to insure proper identity, strength, quality, and purity of the raw materials, whether active or not, including:

(*a*) The specifications for acceptance and methods of testing for each lot of raw material.

(*b*) A statement as to whether or not each lot of raw materials is given a serial number to identify it, and the use made of such numbers in subsequent plant operations.

(vi) The instructions used in the manufacturing, processing, packaging, and labeling of each dosage, including:

(*a*) The method of preparation of the master formula records and individual batch records and the manner in which these records are used.

(*b*) The number of individuals checking weight or volume of each individual ingredient entering into each batch of the new animal drug.

(*c*) A statement as to whether or not the total weight or volume of each batch is determined at any stage of the manufacturing process subsequent to making up a batch according to the formula card and, if so, at what stage and by whom it is done.

(*d*) The precautions used in checking the actual package yeild produced from a batch of the new animal drug with the theoretical yield. This should include a description of the accounting for such items as discards, breakage, etc., and the criteria used in accepting or rejecting batches of drugs in the event of an unexplained discrepancy.

(*e*) The precautions used to assure that each lot of the new animal drug is packaged with the proper label and labeling, including provisions for labeling storage and inventory control.

(*f*) Any special precautions used in the operations.

(vii) The analytical controls used during the various stages of the manufacturing, processing, packaging, and labeling of the new animal drug, including a detailed description of the collection of samples and the analytical procedures to which they are subjected. The analytical procedures should be capable of determining the active components within a reasonable degree of accuracy and of assuring the identity of such components.

(*a*) A description of practicable methods of analysis of adequate sensitivity to determine the amount of the new animal drug in the final dosage form should be included. The dosage form may be a finished pharmaceutical product, a Type A medicated article, a Type B or a Type C medicated feed, or a product for use in animal drinking water. Where two or more active ingredients are included, methods should be quantitative and specific for each active ingredient.

(*b*) If the article is one that is represented to be sterile, the same information with regard to the manufacturing, processing, packaging, and the collection of samples of the drug should be given for sterility controls. Include the standards used for acceptance of each lot of the finished drug.

(viii) An explanation of the exact significance of any batch control numbers used in the manufacturing, processing, packaging, and labeling of the new animal drug, including such control numbers that may appear on the label of the finished article. State whether these numbers enable determination of the complete manufacturing history of the product. Describe any methods used to permit determination of the distribution of any batch if its recall is required.

(ix) Adequate information with respect to the characteristics of and the test methods employed for the container, closure, or other component parts of the drug package to assure their suitability for the intended use.

(x) A complete description of, and data derived from, studies of the stability of the new animal drug in the final dosage form, including information showing the suitability of the analytical methods used. A description of any additional stability studies underway or planned. Stability data for the finished dosage form of the new animal drug in the container in which it is to be marketed, including any proposed multiple dose container, and, if it is to be put into solution at the time of dispensing, for the solution prepared as directed. If the new animal drug is intended for use in the manufacture of Type C medicated feed as defined in § 558.3 of this chapter, stability data derived from studies in which representative formulations of the medicated feed articles are used. Similar data may be required for Type B medicated feeds as determined by the Food and Drug Administration on a case-by-case basis. Expiration dates shall be proposed for finished pharmaceutical dosage forms and Type A medicated articles. If the data indicate that an expiration date is needed for Type B or Type C medicated feeds, the applicant shall propose such expiration date. If no expiration date is proposed for Type B or Type C medicated feeds, the applicant shall justify its absence with data.

(xi) Additional procedures employed which are designed to prevent contamination and otherwise assure proper control of the product. An application may be refused unless it includes adequate information showing that the methods used in, and the facilities and controls used for, the manufacturing, processing, and packaging of the new animal drug are adequate to preserve its identity, strength, quality, and purity in conformity with good manufacturing practice and identifies each establishment, showing the location of the plant conducting these operations.

(6) *Samples.* Samples of the new animal drug and articles used as components and information concerning them may be requested by the Bureau of Veterinary Medicine as follows:

(i) Each sample shall consist of four identical, separately packaged subdivisions, each containing at least three times the amount required to perform the laboratory test procedures described in the application to determine compliance with its control specifications for identity and assays. Each of the samples submitted shall be appropriately packaged and labeled to preserve its characteristics, to identify the material and the quantity in each subdivision of the sample, and to identify each subdivision with the name of the applicant and the new animal drug application to which it relates. Included are:

(*a*) A sample or samples of any reference standard and blank used in the procedures described in the application for assaying each new animal drug and other assayed components of the finished new animal drug.

(*b*) A representative sample or samples of each strength of the finished dosage form proposed in the application and employed in the clinical investigations and a representative sample or samples of each new animal drug from the batch(es) employed in the production of such dosage form.

(*c*) A representative sample or samples of finished market packages of each strength of the dosage form of the new animal drug prepared for initial marketing and, if any such sample is not from a representative commercial-scale production batch, such a sample from a representative commercial-scale production batch, and a representative sample or samples of each new animal drug from the batch(es) employed in the production of such dosage form, provided that in the case of new animal drugs marketed in large packages the

sample should contain only three times a sufficient quantity of the new animal drug to allow for performing the control tests for drug identity and assays.

(ii) The following information shall be included for the samples when requested:

(*a*) For each sample submitted, full information regarding its identity and the origin of any new animal drug contained therein (including a statement whether it was produced on a laboratory, pilot-plant, or full-production scale) and detailed results of all laboratory tests made to determine the identity, strength, quality, and purity of the batch represented by the sample, including assays.

(*b*) For any reference standard submitted, a complete description of its preparation and the results of all laboratory tests on it. If the test methods used differed from those described in the application, full details of the methods employed in obtaining the reporting results.

(7) *Analytical methods for residues.* Applications for new animal drugs shall include a description of practicable methods for determining the quantity, if any, of such drug in or on food, and any substance formed in or on food because of its use, and the proposed tolerance or withdrawal period or other use restrictions for such drug if any tolerance or withdrawal period or other use restrictions are required in order to assure that the proposed use of such drug will be safe. When data or other adequate information establish that it is not reasonable to expect the new animal drug to become a component of food, assay methodology is not required.

(i) The kind of information required by this subdivision may include: Complete experimental protocols for determining drug residue levels in the edible products, and the length of time required for residues to be eliminated from such

products following the drug's use; residue studies conducted under appropriate (consistent with the proposed usage) conditions of dosage, time, and route of administration to show levels, if any, of the drug and/or its metabolites in test animals during and upon cessation of treatment and at intervals thereafter in order to establish a disappearance curve; if the drug is to be used in combination with other drugs, possible effects of interaction demonstrated by the appropriate disappearance curve or depletion patterns after drug withdrawal under appropriate (consistent with the proposed usage) conditions of dosage, time, and route of administration; if the drug is given in the feed or water, appropriate consumption records of the medicated feed or water and appropriate performance data in the treated animal; if the drug is to be used in more than one species, drug residue studies or appropriate metabolic studies conducted for each species that is food-producing. To provide these data, a sufficient number of birds or animals should be used at each sample interval. Appropriate use of labeled compounds (e.g. radioactive tracers), may be utilized to establish metabolism and depletion curves. Drug residue levels ordinarily should be determined in muscle, liver, kidney, and fat and where applicable, in skin, milk, and eggs (yolk and egg white). As a part of the metabolic studies, levels of the drug or metabolite should be determined in blood where feasible. Samples may be combined where necessary. Where residues are suspected or known to be present in litter from treated animals, it may be necessary to include data with respect to such residues becoming components of other agricultural commodities because of use of litter from treated animals.

(ii) If such new animal drug is one which has been shown to induce cancer when ingested by man or animal or after other tests which are appropriate for the evaluation of the safety of such drug and the Secretary is requested to find

that, under the conditions of use specified in the proposed labeling and reasonably certain to be followed in practice, such drug will not adversely affect the animals for which it is intended and that no residue of such drug will be found in any edible portion of such animals after slaughter or in any food yielded by or derived from the animal, methods of analysis shall be submitted in such form as to be suitable for publication in the FEDERAL REGISTER.

(8) *Evidence to establish safety and effectiveness.* (i) An application may be refused unless it contains full reports of adequate tests by all methods reasonably applicable to show whether or not the new animal drug is safe and effective for use as suggested in the proposed labeling.

(ii) An application may be refused unless it includes substantial evidence, consisting of adequate and well-controlled investigations, including field investigation, by experts qualified by scientific training and experience to evaluate the effectiveness of the new animal drug involved, on the basis of which it could fairly and reasonably be concluded by such experts that the new animal drug will have the effect it purports or is represented to have under the conditions of use prescribed, recommended, or suggested in the proposed labeling.

(iii) An application may be refused unless it contains detailed reports of the investigations, including studies made on laboratory animals, in which the purpose, methods, and results obtained are clearly set forth of acute, subacute, and chronic toxicity, and unless it contains appropriate clinical laboratory results related to safety and efficacy. Such information should include identification of the person who conducted each investigation, a statement of where the investigations were conducted, and where the raw data are available in the application.

(iv) All information pertinent to an evaluation of the safety and effectiveness of the new animal drug received or otherwise obtained by the applicant from any source, including information derived from other investigations or commercial marketing (for example, outside the United States), or reports in the scientific literature, both favorable and unfavorable, involving the new animal drug that is the subject of the application and related new animal drugs shall be submitted. An adequate summary may be acceptable in lieu of a reprint of a published report that only supports other data submitted. Include any evaluation of the safety or effectiveness of the new animal drug that has been made by the applicant's veterinary or medical department, expert committee, or consultants.

(v) If the new animal drug is a combination of previously investigated or marketed new animal drugs, an adequate summary of preexisting information from preclinical and clinical investigation and experience with its components, including all reports received or otherwise obtained by the applicant suggesting side effects, contraindications, and ineffectiveness in use of such components, shall be submitted. Such summary should include an adequate bibliography of publications about the components and may incorporate by reference information concerning such components previously submitted to the Food and Drug Administration by the applicant; with written authorization, information may also be incorporated from the material that another applicant has on file with the Food and Drug Administration. Each ingredient designated as active in any new animal drug combination must make a contribution to the effect in the manner claimed or suggested in the labeling, and, if in the absence of express labeling claims of advantages for the combination such a product purports to be better than either component alone, it

must be established that the new animal drug has that purported effectiveness.

(vi) An application shall include a complete list of the names and post office addresses of all investigators who received the new animal drug. This may be incorporated in whole or in part by reference to information submitted under the provisions of § 511.1 of this chapter.

(vii) Explain any omission of reports from any investigator to whom the investigational new animal drug has been made available. The unexplained omission of any reports of investigations made with the new animal drug by the applicant or submitted to him by an investigator or the unexplained omission of any pertinent reports of investigations or clinical experience received or otherwise obtained by the applicant from published literature or other sources that would bias an evaluation of the safety of the new animal drug or its effectiveness in use, constitutes grounds for the refusal or withdrawal of the approval of an application.

(viii) If a sponsor has transferred any obligations for the conduct of any clinical study to a contract research organization, the application is required to include a statement containing the name and address of the contract research organization, identifying the clinical study, and listing the obligations transferred. If all obligations governing the conduct of the study have been transferred, a general statement of this transfer — in lieu of a listing of the specific obligations transferred — may be submitted.

(ix) If original subject records were audited or reviewed by the sponsor in the course of monitoring any clinical study to verify the accuracy of the case reports submitted to the sponsor, a list identifying each clinical study so audited or reviewed.

(9) *New animal drugs subject to section 512(n) of the act.* If the application is for a new animal drug subject to the certification provisions of section 512(n) of the act and the drug is included in regulations promulgated under section 507 of the act, the applicant may be exempted from the submission of some of the information required by paragraph (b)(8) of this section if the application includes data adequate to prove that the new animal drug is comparable to the new animal drug for which certification has been previously provided.

(10) *Supplemental applications.* If it is a supplemental application, full information shall be submitted on each proposed change concerning any statement made in the approved application.

(11) *Applicant's commitment.* It is understood that the labeling and advertising for the new animal drug will prescribe, recommend, or suggest its use only under the conditions stated in the labeling which is part of this application and if the article is a prescription new animal drug, it is understood that any labeling which furnishes or purports to furnish information for use or which prescribes, recommends, or suggests a dosage for use of the new animal drug will also contain, in the same language and emphasis, information for its use including indications, effects, dosages, routes, methods, and frequency and duration of administration, any relevant hazards, contraindications, side effects, and precautions contained in the labeling which is part of this application. It is understood that all representations in this application apply to the drug produced until changes are made in conformity with § 514.8.

(12) *Additional commitments.* (i) New animal drugs as defined in § 510.3 of this chapter, intended for use in the manufacture of animal feeds in any State will be shipped only

to persons who may receive such drugs in accordance with § 510.7 of this chapter.

(ii) The methods, facilities, and controls described under item 5 of this application conform to the current good manufacturing practice regulations in Subchapter C of this chapter.

(iii) With respect to each nonclinical laboratory study contained in the application, either a statement that the study was conducted in compliance with the good laboratory practice regulations set forth in Part 58 of this chapter, or, if the study was not conducted in compliance with such regulations, a brief statement of the reason for the noncompliance.

(13) [Reserved]

(14) *Environmental assessment.* The applicant is required to submit either a claim for categorical exclusion under § 25.24 of this chapter or an environmental assessment under § 25.31 of this chapter.

(15) *Assembling and binding the application.* Assemble and bind an original and two copies of the application as follows:

(i) Bind the original or ribbon copy of the application as copy No. 1.

(ii) Bind two identical copies as copy No. 2 and copy No. 3.

(iii) Identify each front cover with the name of the applicant, new animal drug, and the copy number.

(iv) Number each page of the application sequentially in the upper right hand corner or in another location so that the page numbers remain legible after the application has been bound, and organize the application consistent with paragraphs (b) (1) through (14) of this section. Each copy should bear the same page numbering, whether sequential in

each volume or continuous and sequential throughout the application.

(v) Include complete labeling in each of the copies. It is suggested that labeling be identified by date of printing or date of preparation.

(vi) Submit separate applications for each different dosage form of the drug proposed. Repeating basic information pertinent to all dosage forms in each application is unnecessary if reference is made to the application containing such information. Include in each application information applicable to the specific dosage form, such as labeling, composition, stability data, and method of manufacture.

(vii) Submit in folders amendments, supplements, and other correspondence sent after submission of an original application. The front cover of these submissions should be identified with the name of the applicant, new animal drug, copy number, and the new animal drug application number, if known.

(c) When a new animal drug application is submitted for a new animal drug which has a stimulant, depressant, or hallucinogenic effect on the central nervous system, if it appears that the drug has a potential for abuse, the Commissioner shall forward that information to the Attorney General of the United States.

(d) *Minor use applications.* Applications for minor use new animal drugs:

(1) *Definitions.* For the purpose of this section:

(i) "Minor use" means the use of: (a) New animal drugs in minor animal species, or (b) new animal drugs in any animal species for the control of a disease that (*1*) occurs infrequently or (2) occurs in limited geographic areas.

(ii) "Minor species" means animals other than cattle, horses, swine, chickens, turkeys, dogs, and cats. Sheep are a minor species with respect to effectiveness and animal safety data collection requirements; sheep are a major species with respect to human safety data collection requirements arising from the possible presence of drug residues in food.

(2) *Animal safety, effectiveness, human food safety, and environmental considerations.* Guidelines for the preparation and submission of data to satisfy the requirements of section 512 of the act regarding animal safety, effectiveness, human food safety, and environmental considerations for new animal drugs intended for a "minor use" (as defined in paragraph (d)(1)(i) of this section) are available from the Information and Education Resources Management Staff (HFV-13), Bureau of Veterinary Medicine, Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857.

(i) *Animal safety and effectiveness.* Where the guidelines do not specifically provide for a particular "minor use," the Bureau of Veterinary Medicine, upon request, will advise interested persons on the effectiveness and animal safety data regarding the minor use that will be needed to satisfy the requirements of section 512 of the act. Where scientifically appropriate, the Bureau of Veterinary Medicine will allow the use of animal models and the extrapolation of data from a major species to a minor species to satisfy the requirements of the act.

(ii) *Human food safety and environmental considerations.* These guidelines do not specifically provide for a particular "minor use." Therefore, the Bureau of Veterinary Medicine will, upon request, advise interested persons of the data that will be needed. Where scientifically appropriate, the Bureau of Veterinary Medicine will allow the extrapolation of data

from a major species to a minor species to satisfy the requirements of the act.

(Information collection requirements approved by the Office of Management and Budget under control number 0910-0032)

(Secs. 406, 408, 409, 501, 502, 503, 505, 506, 507, 510, 512-516, 518-520, 601, 701, 706, and 801, 52 Stat. 1049-1053 as amended, 1055, 1056 as amended, 1058 as amended, 55 Stat. 851 as amended, 59 Stat. 463 as amended, 68 Stat. 511-517 as amended, 72 Stat. 1785-1788 as amended, 74 Stat. 399-407 as amended, 76 Stat. 794 as amended, 82 Stat. 343-351, 90 Stat. 539-574 (21 U.S.C. 346, 346a, 348, 351, 352, 353, 355, 356, 357, 360, 360b-360f, 360h-360i, 371, 376); secs. 215, 301, 351, 354-360F, 58 Stat. 690, 702 as amended, 82 Stat. 1173-1186 as amended (42 U.S.C. 216, 241, 262, 263b-263n); secs. 512, 701(a), 52 Stat. 1055, 82 Stat. 343-351 (21 U.S.C. 360b, 371(a)))

[40 FR 13825, Mar. 27, 1975, as amended at 40 FR 52609, Nov. 11, 1975; 42 FR 15675, Mar. 22, 1977; 43 FR 60023, Dec. 22, 1978; 48 FR 1928, Jan. 14, 1983; 50 FR 7517, Feb. 22, 1985; 50 FR 14212, Apr. 11, 1985; 50 FR 16668, Apr. 26, 1985; 51 FR 7391, Mar. 3, 1986; 52 FR 8847, Mar. 19, 1987]

EFFECTIVE DATE NOTE: At 52 FR 8847, Mar. 19, 1987, § 514.1 was amended by adding new paragraphs (b)(8)(viii) and (ix), effective June 17, 1987.

§ 514.8 Supplemental new animal drug applications.

(a)(1) After a new animal drug application is approved, a supplemental new animal drug application may propose changes. A supplemental application may omit statements made in the approved application concerning which no change is proposed. Each supplemental application shall

include up-to-date reports of any of the kinds of information required by § 510.300(a) of this chapter that has not previously been submitted. A supplemental application shall be accompanied by either a claim for categorical exclusion under § 25.24 of this chapter or an environmental assessment under § 25.31 of this chapter.

(2) A supplemental new animal drug application shall be submitted for any change beyond the variations provided for in the application, including changes in the scale of production such as from pilot-plant to production batch, that may alter the conditions of use, the labeling, safety, effectiveness, identity, strength, quality, or purity of the new animal drug, or the adequacy of the manufacturing methods, facilities, or controls to preserve them.

(3) If it is a prescription drug, any mailing or promotional piece used after the drug is placed on the market is labeling requiring a supplemental application, unless:

(i) The parts of the labeling furnishing directions, warnings, and information for use of the drug are the same in language and emphasis as labeling approved or permitted; and

(ii) Any other parts of the labeling are consistent with and not contrary to such approved or permitted labeling.

(4) The supplemental application shall be submitted as follows. A communication proposing a change in a new animal drug application should provide for any one of the following kinds of changes:

(i) Revision in labeling, such as updating information pertaining to effects, dosages, and side effects and contraindications, which includes information headed "side effects," "warnings," "precautions," and "contraindications."

(ii) Addition of claim.

(iii) Revision in manufacturing or control procedures; for example, changes in components, composition, method of manufacture, analytical control procedures, package or tablet size, etc.

(iv) Change in manufacturing facilities.

(v) Provision for outside firm to participate in the preparation, distribution, or packaging of a new animal drug (new distributor, packer, supplier, manufacturer, etc.); one firm per submission.

Any number of changes may be submitted at any one time; but if they fall into different categories as listed in paragraphs (a)(4) (i) through (v) of this section, the proposed changes should be covered by separate communications. Where, however, a change necessitates an overlap in categories, it should be submitted in a single communication. For example, a change in tablet potency would require other changes such as in components, composition, and labeling and should be submitted in a single communication.

(5) The following kinds of changes may be placed into effect without the approval of a supplemental application, if such change is fully described in the next periodic report required under § 510.300(b)(4) of this chapter or, when such a report is not required, in a written communication to the Food and Drug Administration within 60 days of the effective date of the change (this does not apply to a change proposed because of any mixup or any bacteriological or significant chemical, physical, or other change or deterioration in the drug or any failure of one or more distributed batches of the drug to meet its specifications):

(i) A different container size for solid oral dosage forms where container and closure are of the same materials as those provided for in the approved application.

(ii) Change in personnel not involving new facilities.

(iii) Change in equipment that does not alter the method of manufacture of a new animal drug.

(iv) Change from one commercial batch size to another without any change in manufacturing procedure.

(v) Change to more stringent specification without altering the method described in the approved application.

(vi) Inclusion of additional specifications or methods without deletion of those described in the approved application.

(vii) Alternation of specifications or methods for inactive ingredients to bring them into compliance with new or revised specifications or methods in an official compendium.

(viii) Initiation of a product identification coding system.

(ix) Addition to labeling of a reasonable expiration date where none was previously used, with related conditions of drug storage when appropriate, except when evidence shows that a significant deterioration of the drug under marketing conditions has occurred which necessitates the immediate submission of a report under § 510.300(b)(1) of this chapter. The report or written communication describing such change in labeling should include stability data justifying the expiration date and recommended conditions of storage.

(x) Change from paper labels to direct printing on glass or other kinds of immediate containers without a change in text.

(6) Approval of a supplemental new animal drug application will not be required to provide for an additional distribu-

tor to distribute a drug which is the subject of an approved new animal drug application if the conditions described below are met prior to putting such a change into effect. An order may issue refusing approval if any condition is not met or if any of the reasons for refusing or withdrawing approval, as stated in section 512(d) and (e) of the act of § 514.110 applies. For the purposes of maintaining records and making reports under the requirements of § 510.300 of this chapter, a distributor provided for under this section shall be considered an "applicant" within the meaning of § 510.300(b) of this chapter. Said conditions are:

(i) A supplemental application is furnished to the Food and Drug administration to provide for a designated distributor.

(ii) There are no changes from the conditions of the approved application except for a different and suitable proprietary name of the new animal drug (if one is used) and the name and address of the distributor as used on the label and labeling. The name of the distributor shall be accompanied by an appropriate qualifying phrase such as "manufactured for" for "distributed by."

(iii) A distributor's statement is furnished to the Food and Drug Administration for identifying the category of his operations (for example, wholesaler, retailer) and stating: That he will distribute the new animal drug only under the labeling provided for in the new animal drug application; that any other labeling or advertising for the drug will prescribe, recommend, or suggest its use only under the conditions stated in the labeling provided for in the application; and, if the drug is a prescription article, that he is regularly and lawfully engaged in the distribution or dispensing of prescription drugs.

(iv) Nine copies of the printed labels and other labeling to be used by the distributor are submitted, identified with the new animal drug application number.

(b) When necessary for the safety or effectiveness of the drug, a supplemental new animal drug application shall specify a period of time within which the proposed change will be made.

(c) If a material change is made in the components' composition, manufacturing methods, facilities, or controls, or in the labeling or advertising, from the representations in an approved application for a new animal drug (except changes conforming to the conditions set forth in paragraph (a)(5) and (6) and/or paragraphs (d), (e), (f), and (g) of this section), and the drug is marketed before a supplement is approved for such change, approval of the application may be suspended or withdrawn as provided in section 512(e) of the act.

(d) Changes of the following kinds proposed in supplemental new animal drug applications should be placed into effect at the earliest possible time:

(1) The addition to package labeling, promotional labeling, and prescription drug advertising of additional warning, contraindication, side effect, and precaution information.

(2) The deletion from package labeling, promotional labeling, and drug advertising of false, misleading, or unsupported indications for use or claims for effectiveness.

(3) Changes in the methods, facilities, or controls used for the manufacturing, processing, packing, or holding of the new animal drug (other than utilization of establishments not covered by the approval that is in effect) that give increased assurance that the drug will have the characteristics of iden-

tity, strength, quality, and purity which it purports or is represented to possess.

(e) The Food and Drug Administration will take no action against a new animal drug or applicant solely because changes of the kinds described in paragraph (d) of this section are placed into effect by the applicant prior to his receipt of a written notice of approval of the supplemental new animal drug application if all the following conditions are met:

(1) The supplemental new animal drug application providing a full explanation of the basis for the changes has been submitted, plainly marked on the mailing cover and on the supplement, "Special new animal drug application Supplement — changes being effected."

(2) The applicant specifically informs the Food and Drug Administration of the date on which such changes are being effected and submits to the Administration nine printed copies of any revised labeling to be placed in use, identified with the new animal drug application number.

(3) All promotional labeling and all drug advertising are promptly revised consistent with the changes made in the labeling on or within the new animal drug package.

(f) When a supplemental new animal drug application proposes changes only of the kinds described in paragraph (d) of this section, and the applicant informs the Food and Drug Administration that the changes are being put into effect, such notification will be regarded as an agreement by the applicant to an extension of the time for formal action on the application.

(g) In addition to changes as permitted by paragraphs (d) and (e) of this section, an applicant may place into effect changes proposed in a supplement to a new animal drug

application that became effective prior to October 10, 1962, upon written notification from the Food and Drug Administration that such action is permitted, without approval of the supplemental application, pending the completion of the review of the effectiveness of such drug by the National Academy of Sciences-National Research Council and a determination as to whether there are grounds for refusing approval under section 512(d) of the act or for invoking section 512(e) of the act. The Food and Drug Administration will take no action against a new animal drug or an applicant solely because changes that have been permitted in a written communication are placed into effect by the applicant prior to his receipt of a written notice of approval of the supplemental new animal drug application.

(h) Except as provided in paragraphs (e) and (g) of this section, no provision of this section shall limit the authority of the Secretary or of the Commissioner to suspend or withdraw approval of a new animal drug application in accord with the provisions of section 512(e) of the act or to initiate any other regulatory proceedings with respect to a drug or applicant under provisions of the act.

(i) Changes from the conditions of an approved new animal drug application in accord with the provisions of paragraphs (d), (e) and (g) of this section are permitted on the basis of a temporary deferral of final action on the supplemental application under the provisions of section 512(c), (d), or (e) of the act.

(j) When an applicant receives written notification from the Food and Drug Administration, under the provisions of paragraph (g) of this section, that he may place into effect changes proposed in a supplemental application without approval of the supplemental application, he may within 30 days submit a written request that the Food and Drug

Administration process the supplemental application. In such case, the change shall not be put into effect until approved. Within 180 days of the receipt of such written request, the Food and Drug Administration will approve the supplemental application or furnish notice of an opportunity for a hearing under the provisions of section 512(d) or (e), or both, of the act on a proposal to refuse approval of the supplemental application or to withdraw approval of the application and supplements thereto.

(k) A supplement to an application that became effective prior to October 10, 1962, may include a written statement to the effect that a temporary deferral of final action under the provisions of paragraph (d), (e), or (g) of this section is unacceptable to the applicant and that the applicant requests action as provided in section 512(c) of the act. Final action on such supplemental applications will be expedited in accord with applicable provisions of section 512 of the act and regulations in this Subchapter E. In such cases, if the applicant places into effect any of the proposed changes prior to his receipt of a written notice of approval of the supplemental new animal drug application, such action may be regarded by the Food and Drug Administration as a basis for invoking the provisions of section 512(e)(1)(D) of the act; that is, the applicant may be furnished notice of an opportunity for a hearing on a proposal to withdraw approval of the application on the ground that the application contains an untrue statement of a material fact related to the changes from the conditions approved in the application.

(l) A supplemental application that contains nonclinical laboratory studies shall include, with respect to each nonclinical study, either a statement that the study was conducted in compliance with the requirements set forth in Part 58 of this chapter, or, if the study was not conducted in compliance

with such regulations, a brief statement of the reason for the noncompliance.

(Secs. 406, 408, 409, 501, 502, 503, 505, 506, 507, 510, 512-516, 518-520, 601, 701, 706, and 801, 52 Stat. 1049-1053 as amended, 1055, 1056 as amended, 1058 as amended, 55 Stat. 851 as amended, 59 Stat. 463 as amended, 68 Stat. 511-517 as amended, 72 Stat. 1785-1788 as amended, 74 Stat. 399-407 as amended, 76 Stat. 794 as amended, 82 Stat. 343-351, 90 Stat. 539-574 (21 U.S.C. 346, 346a, 348, 351, 352, 353, 355, 356, 357, 360, 360b-360f, 360h-360i, 371, 376); secs. 215, 301, 351, 354-360F, 58 Stat. 690, 702 as amended, 82 Stat. 1173-1186 as amended (42 U.S.C. 216, 241, 262, 263b-263n))

[40 FR 13825, Mar. 27, 1975, as amended at 50 FR 7517, Feb. 22, 1985; 50 FR 16668, Apr. 26, 1985]

§ 555.110c Chloramphenicol oral solution.

(a) *Requirements for certification —*

(1) *Standards of identity, strength, quality, and purity.* Chloramphenicol oral solution is a solution containing chloramphenicol and one or more suitable and harmless buffers and preservatives in a suitable and harmless solvent. Each milliliter contains 100 or 250 milligrams of chloramphenicol. The chloramphenicol content is satisfactory if it is not less than 90 percent and not more than 120 percent of the number of milligrams of chloramphenicol that it is represented to contain. The pH is 5.0 to 8.5. The chloramphenicol used conforms to the standards prescribed in § 455.10(a)(1) of this chapter.

(2) *Packaging.* It shall be packaged in accordance with the requirements of § 510.45 of this chapter.

(3) *Labeling.* It shall be labeled in accordance with the requirements of paragraph (c) of this section and § 510.55 of this chapter.

(4) *Requests for certification; samples.* In addition to the requirements of § 514.50 of this chapter, each such request shall contain:

(i) Results of tests and assays on:

(a) The chloramphenicol used in making the batch for potency, safety, pH, specific rotation, melting point, absorptivity, and crystallinity.

(b) The batch for potency and pH.

(ii) Samples required:

(a) The chloramphenicol used in making the batch: 10 packages, each containing approximately 300 milligrams.

(b) The batch: A minimum of 6 immediate containers.

(b) *Test and methods of assay* — (1) *Potency.* Proceed as dirrected in § 436.106 of this chapter, preparing the sample for assay as follows: Dilute an accurately measured representative portion of the sample with distilled water to obtain a stock solution of convenient concentration. Further dilute an aliquot of the stock solution with distilled water to the reference concentration of 2.5 micrograms of chloramphenicol per milliliter (estimated).

(2) *pH.* Proceed as directed in § 436.202 of this chapter, diluting the sample with an equal volume of distilled water.

(c) *Conditions of marketing* — (1) *Specifications and special considerations.* The product complies with the requirements of paragraph (a) of this section.

(2) *Sponsor.* (i) For solutions containing 100 milligrams of chloramphenicol per milliliter see 000010, 000069, 010271, and 049047 in § 510.600(c) of this chapter.

(ii) For solutions containing 250 milligrams of chloramphenicol per millilliter see 000010 and 013983 in § 510.600(c) of this chapter.

(3) *Conditions of use.* (i) It is used in dogs for treating bacterial pulmonary infections, urinary tract infections, enteritis, and infections associated with canine distemper that are caused by organisms susceptible to chloramphenicol.

(ii) It is administered orally to dogs at a dosage level of 25 milligrams per pound of body weight every 6 hours. In severe infections, 4 to 6 hour treatment intervals may be desirable the first day of treatment. If no response is obtained in 3 to 5 days, discontinue use of the drug and review the diagnosis.

(iii) The label bears a statement that this product is not to be used in animals which are raised for food production.

(iv) Federal law restricts this drug to use by or on the order of a licensed veterinarian.

(Secs. 507, 512(n), 701 (f) and (g), 52 Stat. 1005-1056 as amended, 59 Stat. 463 as amended, 82 Stat. 350-351 (21 U.S.C. 357, 360b(n), 371 (f) and (g); sec. 512 (i) and (n), 82 Stat. 347, 350-351 (21 U.S.C. 360b (i) and (n)))

[40 FR 13938, Mar. 27, 1975, as amended at 46 FR 21362, Apr. 10, 1981; 46 FR 59969, Dec. 8, 1981; 48 FR 3961, Jan. 28, 1983; 48 FR 30615, July 5, 1983; 48 FR 37623, Aug. 19, 1983; 49 FR 37059, Sept. 21, 1984]

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

CLOIS AND ANITA OSBURN,
v.
RACHELLE LABORATORIES, INC.,
v.
JACK SWAIN, D.V.M. and
ANCHOR LABORATORIES, INC.,

CIVIL ACTION NO.
W-84-CA-141

AMENDED FINAL JUDGMENT

This cause came on for trial before the Honorable Walter S. Smith, Jr., District Judge, and a jury on December 2, 1985, and the Plaintiffs Clois and Anita Osburn, the Defendant Rachelle Laboratories, Inc., and Third-Party Defendant Jack Swain, D.V.M. appeared in person and by and through their attorneys of record and announced ready for trial. A jury having been previously demanded, was seated consisting of six good and lawful jurors duly impaneled and the case proceeded to trial.

At the conclusion of the evidence, the Court submitted the case to the jury upon Special Interrogatories. The Instructions to the Jury, including the Special Interrogatories and the verdict of the jury, are incorporated herein for all purposes by this reference. It appearing to the Court that the verdict of the jury was for the Plaintiff and against Rachelle Laboratories, Inc., and Anchor Laboratories, Inc., the jury having further found that Jack Swain, D.V.M. and Clois Osburn were not negligent.

And now, in accordance with and consideration of the special verdict of the jury, the stipulations of compromise, settlement and release between Plaintiffs, Clois and Anita

Osburn, and Anchor Laboratories, Inc. pursuant to the Agreed Order of Dismissal signed and entered by the Court on January 2, 1986, and the opinion of the Court,

IT IS HEREBY ORDERED, ADJUDGED AND DECREED that the Plaintiffs Clois and Anita Osburn, recover of and from the Defendant Rachelle Laboratories, Inc., the sum of TWO-MILLION FIVE HUNDRED FIFTY THOUSAND DOLLARS AND NO ONE-HUNDREDTHS DOLLARS ($2,550,000.00) with interest thereon at the rate of ten percent (10%) per annum from date of entry of this judgment, until paid.

It appearing to the Court that the verdict of the Jury was in favor of Third Party Defendant, Jack Swain, D.V.M., as to the Third Party action of Rachelle Laboratories, Inc. filed against Jack Swain, D.V.M., the Court is of the opinion and ORDERS and DECREES Third Party Plaintiff, Rachelle Laboratories, Inc. do have and take nothing of and from Third Party Defendant, Jack Swain, D.V.M.

IT IS FURTHER ORDERED, ADJUDGED and DECREED that Third Party Plaintiff, Anchor Laboratories, Inc., do have and take nothing of and from Third Party Defendant, Jack Swain, D.V.M.

IT IS FURTHER ORDERED, ADJUDGED and DECREED that the claims and controversy between Clois and Anita Osburn and Anchor Laboratories, Inc., are DISMISSED.

All costs of court expended or incurred in this case are hereby adjudged against the Defendant and Third Party Plaintiff, Rachelle Laboratories, Inc.,

All writs and processes for the enforcement and collection of this judgment or the costs of court may issue as necessary. All other relief not expressly granted herein is denied.

Judgment rendered and entered this 2nd day of January, 1986.

/s/ WALTER S. SMITH, JR.
Walter S. Smith, Jr.
United States District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

CLOIS AND ANITA OSBURN
Plaintiffs

vs.

RACHELLE LABORATORIES, INC.
Defendant

vs.

JACK SWAIN, D.V.M. and
ANCHOR LABORATORIES, INC.
Third-Party Defendants.

CIVIL ACTION NO.
W-84-CA-141

ORDER DENYING DEFENDANT RACHELLE LABORATORIES, INC.'S MOTION FOR NEW TRIAL

On this day came on to be considered Defendant Rachelle Laboratories, Inc.'s Motion for New Trial, or, In the Alternative, for a Remittitur, and the Court, having considered the evidence and the arguments and authorities submitted by counsel, is of the opinion and finds that the Motion should in all things be denied.

It is so ORDERED.

SIGNED this 5th day of February, 1986.

/s/ WALTER S. SMITH, JR.
United States District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

CLOIS AND ANITA OSBURN
Plaintiffs

vs.

RACHELLE LABORATORIES, INC.
Defendant

vs.

JACK SWAIN, D.V.M. and
ANCHOR LABORATORIES, INC.
Third-Party Defendants.

CIVIL ACTION NO.
W-84-CA-141

ORDER DENYING DEFENDANT RACHELLE LABORATORIES, INC.'S MOTION FOR JUDGMENT NOTWITHSTANDING THE VERDICT

On this day came on to be considered Defendant Rachelle Laboratories, Inc.'s Motion for A Judgment Notwithstanding the Verdict, and the Court, having considered the motion, evidence, and the arguments and authorities submitted by counsel, it is of the opinion and finds that the Motion should in all things be denied.

It is so ORDERED.

SIGNED this 5th day of February, 1986.

/s/ WALTER S. SMITH, JR.
United States District Judge

UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

No. 86-1094

D. C. Docket No. W-84-CA-141

CLOIS OSBURN AND ANITA OSBURN,
Plaintiffs-Appellees,

versus

ANCHOR LABORATORIES, INC.,
Defendant,

RACHELLE LABORATORIES, INC.
Defendant-Appellant.

Appeal from the United States District Court for the Western District of Texas

Before WISDON, RUBIN, and GARWOOD, Circuit Judges.

JUDGMENT

This cause came on to be heard on the record on appeal and was argued by counsel.

ON CONSIDERATION WHEREOF, It is now here ordered and adjudged by this Court that the judgment of the District Court in this cause is affirmed in part and vacated in part and the cause is remanded to the District Court for further proceedings in accordance with the opinion of this Court.

IT IS FURTHER ORDERED that plaintiffs-appelees pay two-thirds of the costs on appeal and that the appellant pays one-third, said costs to be taxed by the Clerk of this Court.

August 28, 1987

ISSUED AS MANDATE: December 3, 1987

OP-JDT-11

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

CLOIS AND ANITA OSBURN, v. RACHELLE LABORATORIES, INC., v. JACK SWAIN, D.V.M. and ANCHOR LABORATORIES, INC.,	CIVIL ACTION NO. W-84-CA-141

CONSENT TO REMITTITUR

TO THE HONORABLE JUDGE TO SAID COURT:

THIS cause came on for trial before the Honorable Walter S. Smith, Jr., District Judge, and a jury on December 2, 1985, and an Amended Final Judgment in favor of the Plaintiffs was rendered and entered on January 2, 1986, awarding the Plaintiffs Clois and Anita Osburn the sum of TWO MILLION FIVE HUNDRED FIFTY THOUSAND DOLLARS AND NO ONE-HUNDREDTHS DOLLARS ($2,550,000.00) with interest thereon at the legal rate of 10% per annum from date of entry of the judgment until paid, against Defendant Rachelle Laboratories, Inc.

Defendant Rachelle Laboratories, Inc. duly appealed the judgment of this Court to the United States Court of Appeals for the Fifth Circuit. The United States Court of Appeals for the Fifth Circuit has directed this Court to order a new trial on Mr. Osburn's claims for damages unless Mr. Osburn agrees to a remittitur of his portion of the judgment to the sum of

ONE MILLION FIVE HUNDRED SEVENTY EIGHT THOUSAND ONE HUNDRED NINETY FIVE AND NO ONE-HUNDREDTHS DOLLARS ($1,578,195.00). In all other respects, the judgment of this Court was affirmed by the Fifth Circuit including Mrs. Osburn's damage award of FOUR HUNDRED TWENTY FIVE THOUSAND AND NO ONE-HUNDREDTHS DOLLARS ($425,000.00).

Plaintiff Clois Osburn died on July 20, 1987. On December 3, 1987 the Fifth Circuit substituted Anita Osburn, independent executrix of the Estate of Clois Osburn, deceased, as a party plaintiff in place of Clois Osburn.

Anita Osburn, independent executrix of the Estate of Clois Osburn, deceased, and as substituted party plaintiff in place of Clois Osburn, hereby consents to the remittitur of Clois Osburn's damages to the sum of ONE MILLION FIVE HUNDRED SEVENTY EIGHT THOUSAND ONE HUNDRED NINETY FIVE AND NO ONE-HUNDREDTHS DOLLARS ($1,578,195.00), which, when added to Anita Osburn's individual damages of FOUR HUNDRED TWENTY FIVE THOUSAND AND NO ONE-HUNDREDTHS DOLLARS ($425,000.00), will reduce the total judgment to the sum of TWO MILLION THREE THOUSAND ONE HUNDRED NINETY FIVE AND NO ONE-HUNDREDTHS DOLLARS

($2,003,195.00) with interest thereon at the rate of 10% per annum from January 2, 1986, until paid.

Respectfully submitted,

WILLIAMS, PATTILLO & SQUIRES
3501 West Waco Drive
Waco, TX 76710
(817) 752-9966

By: /s/ DALE D. WILLIAMS
Dale D. Williams
State Bar No. 21523000
Attorneys for Plaintiff

CERTIFICATE OF SERVICE

This is to certify that a true and correct copy of the above and foregoing Consent to Remittitur has been sent by certified mail, return receipt requested, to Defendant Rachelle Laboratories, Inc.'s attorney of record, Mr. G. Luke Ashley, Thompson & Knight, 3300 First City Center, 1700 Pacific Avenue, Dallas, TX 75201 on this the 8th day of December, 1987.

/s/ DALE D. WILLIAMS
Dale D. Williams

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

CLOIS AND ANITA OSBURN,
vs.
RACHELLE LABORATORIES, INC.,
vs.
JACK SWAIN, D.V.M. and
ANCHOR LABORATORIES, INC.

CIVIL ACTION NO.
W-84-CA-141

AMENDED FINAL JUDGMENT

This cause came on for trial before the Honorable Walter S. Smith, Jr., District Judge, and a jury on December 2, 1985, and the Plaintiffs Clois and Anita Osburn, the Defendant Rachelle Laboratories, Inc., and Third-Party Defendant Jack Swain, D.V.M. appeared in person and by and through their attorneys of record and announced ready for trial. A jury having been previously demanded, was seated consisting of six good and lawful jurors duly impaneled and the case proceeded to trial.

At the conclusion of the evidence, the Court submitted the case to the jury upon Special Interrogatories. The Instructions to the Jury, including the Special Interrogatories and the verdict of the jury, are incorporated herein for all purposes by this reference. It appearing to the Court that the verdict of the jury was for the Plaintiff and against Rachelle Laboratories, Inc., and Anchor Laboratories, Inc., the jury having further found that Jack Swain, D.V.M. and Clois Osburn were not negligent.

On January 2, 1986 an Amended Final Judgment was rendered and entered by this Court that Plaintiffs Clois and Anita Osburn recover of and from Defendant Rachelle Labo-

ratories, Inc., the sum of TWO MILLION FIVE HUNDRED FIFTY THOUSAND DOLLARS AND NO/100 DOLLARS ($2,550,000.00) with interest thereon at the rate of TEN (10%) PER CENT per annum from January 2, 1986 until paid.

It appearing to the Court that Defendant Rachelle Laboratories, Inc., duly appealed the January 2, 1986 Judgment to the United States Court of Appeals for the Fifth Circuit and, by Opinion dated August 28, 1987, the Fifth Circuit affirmed the January 2, 1986 Judgment, as to Anita Osburn and remanded the case as to Clois Osburn's damages unless Mr. Osburn agreed to a remittitur to the sum of ONE MILLION FIVE HUNDRED SEVENTY EIGHT THOUSAND ONE HUNDRED NINETY-FIVE DOLLARS AND NO/100 DOLLARS ($1,578,195.00).

It further appearing to the Court that Plaintiff Clois Osburn died on July 20, 1987 and Plaintiff Anita Osburn, as Independent Executrix of the Estate of Clois Osburn was substituted as a Party-Plaintiff in place of Clois Osburn by Order of the Fifth Circuit Court of Appeals, dated December 3, 1987, and that Anita Osburn, as Independent Executrix of the Estate of Clois Osburn and as substituted Party-Plaintiff, filed her Consent to Remittitur in this Court on December 8, 1987.

And now, in accordance with and consideration of the special verdict of the jury, the Opinion of the Fifth Circuit Court of Appeals, the Consent to Remittitur, the stipulations of compromise, settlement and release between Plaintiffs, Clois and Anita Osburn, and Anchor Laboratories, Inc. pursuant to the Agreed Order of Dismissal signed and entered by the Court on January 2, 1986, and the opinion of the Court,

IT IS HEREBY ORDERED, ADJUDGED AND DECREED that the Plaintiff Anita Osburn, individually and as substituted Party-Plaintiff for Clois Osburn, deceased, recover of and from the Defendant Rachelle Laboratories, Inc., the sum

of TWO MILLION THREE THOUSAND ONE HUNDRED NINETY-FIVE DOLLARS AND NO/100 DOLLARS ($2,003,195.00) with interest thereon at the rate of SEVEN AND FIFTY-SEVEN ONE HUNDREDTHS (7.57%) PER CENT per annum, compunded annually, from January 2, 1986 until paid.

It appearing to the Court that the verdict of the Jury was in favor of Third Party Defendant, Jack Swain, D.V.M., as to the Third Party action of Rachelle Laboratories, Inc. filed against Jack Swain, D.V.M., the Court is of the opinion and ORDERS and DECREES Third Party Plaintiff, Rachelle Laboratories, Inc. do have and take nothing of and from Third Party Defendant, Jack Swain, D.V.M.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that Third Party Plaintiff, Anchor Laboratories, Inc., do have and take nothing of and from Third Party Defendant, Jack Swain, D.V.M.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that the claims and controversy between Clois and Anita Osburn and Anchor Laboratories, Inc. are DISMISSED.

All costs of court expended or incurred in this case are hereby adjudged against the Defendant and Third Party Plaintiff, Rachelle Laboratories, Inc.,

All writs and processes for the enforcement and collection of this Judgment or the costs of court may issue as necessary. All other relief not expressly granted herein is denied.

Judgment rendered and entered on this 18th day of December, 1987.

/s/ WALTER S. SMITH, JR.
Walter S. Smith, Jr.
United States District Judge